### DEVELOPMENT AND VALIDATION OF A BRIEF PSYCHOLOGICAL INTERVENTION TO MANAGE COMMON MENTAL HEALTH PROBLEMS IN GENERAL PRACTICE

Thesis Submitted For the Award of the Degree of

### **DOCTOR OF PHILOSOPHY (Ph.D)**

in

**Psychology** 

By
Harvinder Pal Singh
(41600111)

Supervised By;
Dr Manish Kumar Verma



LOVELY PROFESSIONAL UNIVERSITY
PUNJAB
2022

### **DECLARATION**

I, hereby declare that the thesis entitled "Development and Validation of a Brief Psychological Intervention to Manage Common Mental Health Problems in General Practice" is a result of original investigation conducted by me under the supervision of Dr. Manish Kumar Verma, Professor, School of Humanities, Lovely Professional University Punjab.

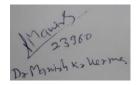
This thesis or any part thereof has not been submitted by me for the award of any research degree to this University or any other institution.

Hornel

Harvinder Pal Singh 28.11.2022

### Certificate

This is to certify that Harvinder Pal Singh has completed this piece of research of work entitled "Development and Validation of a Brief Psychological Intervention to Manage Common Mental Health Problems in General Practice" for the degree of Doctor of Philosophy under my supervision in School of Humanities, Lovely Professional University, Phagwara. To my best of my knowledge, this thesis is result of his own investigation and has not been submitted elsewhere for any degree or any other distinction.



Dr. Manish Kumar Verma

(Supervisor)

Professor, School of Humanities

Lovely Professional University

Punjab

### **Abstract**

The purpose of this research was to develop and validate a Brief Psychological Intervention (BPI) to manage common mental health problems in general practice. After having valuable inputs from the subject experts and general practitioners, the final draft of BPI was developed. For content validation of BPI, expert judgment was obtained and Aiken's V formula was used for measuring experts' consensus rate. To ensure empirical validation, quasi-experiment with two groups control design with a pretest and post-test measure conducted. 30 general practitioners, 15 each in experimental group and control group were involved in this study.

Data collection from 30 General Practitioners practicing at Jalandhar city (Punjab, India) through evaluation of 3000 patients, was conducted for the first phase. For second phase, 450 patients, 225 each in Pre and Post test design, was included to obtain data. The developed BPI was delivered to the fifteen general practitioners of experimental group by a subject expert. BPI was developed to help the general practitioners in two ways, first to enhance their clinical skills to identify common mental health problems at their clinics, and second by managing the diagnosed mental health problems more effectively. Data from control and experimental groups analyzed to compare the percentage of accurate identification of common psychological problems by General practitioners. To study the prevalence and severity of anxiety, depression and somatic symptom disorder, '12-item General Health Questionnaire (GHQ-12 scale)' developed by Goldberg and Paul Williams, 'Generalized Anxiety Disorder Scale-7 (GAD-7 scale)' developed by Spitzer, 'Patient health questionnaire-9 (PHQ-9 Scale)' developed by Kroenke and Spitzer and 'Patient Health Questionnaire-15 (PHQ-15 Scale)' developed by Robert Spitzer, Janet Williams, and Kurt Kroenke were put in use. Paired t Test was performed to find out pre and post intervention differences. The results showed that brief psychological intervention had a significant effect in identifying anxiety, depression and somatic symptom disorder at general practice level. The sensitivity of experimental group general practitioners in identifying common mental health problems improved from 48.4% to 90.7%. The result also showed that the mean scores of anxiety, depression and somatic symptom disorder of experimental group differ significantly from the corresponding mean scores of control group after the intervention, indicating BPI has a significant effect in managing common mental health problems at general practice level.

Keywords: Anxiety, Depression, Somatic symptom disorder, Brief psychological intervention, General practitioners

### Acknowledgments

First of all, my sincere thanks and gratitude for the two living legends—My Parents.

And a bundle of thanks to my research supervisor, Dr. Manish Kumar Verma, for the time, guidance, support and the enthusiasm I received from him, from start to finish. I have learnt a lot through this process and the credit for that goes to Dr. Pardeep Choudhry and Dr. Hariom Sharma, my initial guides, who helped me in the infancy stage of my research work, and for helping me to settle my problems related to my research in its budding stage. Special thanks to my gracious better-half Dr. Gurpreet Kaur for accommodating me by giving me ample time and space to finish my research project. In fact it was her time which I snatched from her to complete my thesis.

At last but not the least, this acknowledgement would not be complete without mentioning the names of some of the important persons who hold a great value in my Life—My brother Manpreet Singh, my *Bhabhi* Sheena, my lovely niece Bhavneet & Jessica and my great sons Taranjot & Jaideep. Thanks you all for your kind cooperation and best wishes.

12 July, 2022

CHAPTER 1	PAGE NO	
1.1 Introduction	12	
1.2 Effectiveness of brief psychological Interventions	12	
1.3 Mental Health	13	
1.3.(a) Mental health The Indian scenario	16	
1.3.(B) Prevalence of mental health problems	20	
1.3 Common Mental Health problems		
1.3.1 Anxiety	21	
1.3.1.1 Types of Anxiety	22	
1.3.1.2 Prevalence of Anxiety in India	23	
1.3.2 Depression	25	
1.3.2.1Changes from DSM 4 to DSM 5	27	
1.3.2.2 Prevalence of Depression in India	28	
1.3.3Somatic Symptom Disorder	30	
1.3.3.1 Prevalence of SSD in India	34	
1.3.4 Knowledge and attitude of general practitioners towards common mental health problems.	36	
1.3.5 What impedes general practitioners to identify common mental health problems?	38	
1.3.6 Role of General Practitioners to manage common mental health problems.	39	
1.3.7Integrating mental health with primary care	41	
1.3.8 Importance of Primary Care –WHO model	44	
1.4 Imparting Mental health training to general practitioners	45	
1.4.1 Mental Health training.	47	
1.4.2Impact of Mental Health Training	50	
1.5. Significance of the study	52	
1.5.1 Research Gap	52	
152 Need for the study	53	

1.5.3 Research question		
1.5.4 Statement of the problem		
CHAPTER 2		
2.1 Review of literature	57	
2.1.1 Concept of BPI	57	
2.1.2Anxiety and Brief Psychological Interventions	61	
2.1.3Depression and Brief Psychological Interventions	66	
2.1.4 SSD and Brief Psychological Intervention	68	
CHAPTER 3		
3.1 Methodology	73	
3.1.1 Objectives of the study	73	
3.1.2 Hypotheses	73	
3.1.3 Research design	74	
3.1.4 Development& Validation of BPI74		
3.1.5 Inclusion criteria	80	
3.1.6 Exclusion criteria	80	
3.1.7 Sample	80	
3.1.8 Variables	80	
3.2 Tools	81	
3.3.1 The 12-item General Health Questionnaire (GHQ-12 scale)81		
3.3.2 The Generalized Anxiety Disorder Scale-7 (GAD-7 scale)	82	
3.3.3The patient health questionnaire-9 (PHQ-9 Scale)	83	
3.3.4The Patient Health Questionnaire-15 (PHQ-15 Scale)	83	
3.3.5 Implication of study	85	
3.3.6 Limitation	85	
3.3.7 Recommendations	85	
3.2.3 Brief Psychological Intervention	86	

# CHAPTER 4 4.1 Results 149 4.2 Discussion 172 CHAPTER 5 184 5.1 Summary 184 5.2 Conclusion 184 References 187

### LIST OF TABLES

Table No.	Title	Page No.
1	Socio-demographic characteristics of the studied subjects	151
2	Prevalence of non-psychological and psychological patients	152
3	Gender GHQ-12 Cross tabulation	152
4	Prevalence of Anxiety, Depression and SSD	153
5	Socio-demographic characteristics of the studied subjects according to their psychological disorders	154
6	GPs and Investigator's pre and post test sensitivity in term of numbers in Identifying common mental health Problems in control and experimental groups	158
7	GP's pre and post test sensitivity in term of percentage in Identifying common mental health Problems in control and experimental groups	159
8	GPs and Investigator's pre and post test specific sensitivity in identifying anxiety, depression and somatic system disorder in control and experimental groups	161
9	GP's pre and post test sensitivity in term of percentage in Identifying Anxiety, Depression and Somatic Symptom Disorder (SSD) in control and experimental groups	162
10	Mean Scores of Control Group and Experimental Group Before Intervention with regard to Anxiety, Depression and Somatic Symptom Disorder	163
11	Mean scores of the Experimental Group before and after Intervention with regard to Anxiety, Depression and Somatic Symptom Disorder	165
12	Mean scores of the Experimental Group and Control group after Intervention with regard to Anxiety, Depression and Somatic Symptom Disorder	168
13	Pearson's correlation analysis of Anxiety, Depression and Somatic symptom disorder among patients visiting general practitioners.	172
14	Conclusion of Research	187

### LIST OF FIGURES

Figure No.	Title	Page No.
1	Prevalence of Anxiety, Depression and Somatic symptom disorder	153
2	Control group and experimental group, before and after intervention, with regard to general practitioners ssensitivity in identifying common mental health problems	160
3	Mean Scores of Control Group and Experimental Group Before Intervention with regard to Anxiety, Depression and Somatic Symptom Disorder	165
4	Mean scores of the Experimental Group before and after Intervention with regard to Anxiety, Depression and Somatic Symptom Disorder	167
5	Mean scores of the Experimental Group and Control group after Intervention with regard to Anxiety, Depression and Somatic Symptom Disorder	170
6	Venn diagram showing overlap of anxiety, depression and somatic symptom disorder as a frequency of the identified sample	171

### LIST OF APPENDICES

Appendices No.	Title	Page No.
I	Socio-demographic characteristics of General Practitioners	202
II	Pre-test form for General Practitioners	204
III	Post-test form for General Practitioners	205
IV	Form for Psychiatrist / Psychologist / General Practitioner for providing their inputs for development of Brief Psychological Intervention	206
V	Form for rating of Brief Psychological Intervention for general practitioners	208
VI	PHQ 12 Scale	210
VII	GAD -7 Scale	211
VIII	PHQ 8 Scale	212
IX	PHQ-15 Scale	213

## Chapter 1 Introduction

### 1.1 Introduction

Alma Ata Declaration was declared in September 1978 on primary health care, but forty three years after that historical declaration on primary health care, its core values still very much relevant even today. The first and the foremost principle of that W.H.O. declaration reiterate that "health is not only absence of disease but a state of complete physical, mental and social wellbeing."

But see the today's scenario, we have eradicated small pox and going to eliminate polio from the surface of earth, and have got a major control over the infectious diseases, but in spite of this control over the physical health problems, doctors are getting more and more numbers of patients in their OPDs, as these diseases are being replaced by mental disorders.

Primary care centers are projected as the next frontiers of the clinical psychology. This projection is based on the ground that maximum number of patients consults their primary care physicians to seek consultation for their mental health instead of a psychiatric or a psychologist. But it remains the prerogative of the physicians to make the diagnosis correct or incorrect. And very interestingly it has documented that maximum number of primary care physicians or General Practitioners commonly fail to diagnose common psychological problem like anxiety or depression. (Lary, 2006).

Mirosława and Mariusz (2014) studied to analyse up to which level the persons from medical profession like doctors are having knowledge of clinical psychology in their own clinical practice. They very beautifully concluded that performing a medical profession needs thoroughly knowledge of psychology along with academic knowledge of medical profession. It will help a lot in their clinical practice.

### 1.2 Effectiveness of brief psychological Interventions.

Michelson D. et al. (2019) developed psychological intervention under the PRIDE programme which was aimed to form a group of trans-diagnostic psychological interventions in Indian secondary schools. During both the pilot studies, a great demand was noticed and this led to very strict criteria and an improved sensitisation plan. The findings helped to shape intervention as frontline treatment to address psychological problems faced by adolescent falling in low income group.

Seshadri (2019) did a study to assess and know the efficacy of intervention to improve the general health of women. 'Sudarshan Kriya Yoga' which is a yogic breathing technique developed by Art of Living was used as an intervention. After the data analyses it was observed that after the intervention, 75% improvement was noticed in the general health of women. This is very significant statistically. The study also highlighted the importance of this low costing yoga-based intervention for improving general health of women.

Ramanuj & Ferenchick (2019) did research work on interventions, which help the primary care physicians. The study is of the opinion that psychological interventions must make the general practitioners capable enough to diagnose depression accurately, particularly in those settings where treatment and follow-up facility is available. To address the anxiety, breathing exercises are recommended, and for the depression symptoms, scheduling activities are recommended.

Vikram (2010) did a study to find out the major cause of global burden of disease. He concluded that depression and anxiety disorders, which are the commonest form of disorders, are main cause of global burden of disease. As per this study, the frequency of occurrence of all these disorders varies a lot in primary care. This frequency is having the mean value of 20%, and this value comes from the studies of 14 countries. But less than one third of these cases are identified and diagnosed at general practice level. There are lot of studies showing the great efficacy of brief psychological treatments and antidepressant drugs treating common mental disorders, but the data establishing the efficacy of psychological intervention treating the mental disorders is still facing many obstacles. These hindrances include the minimal identification of psychological problems by general practitioners.

### 1.3 MENTAL HEALTH

A report was published on Mental health into primary care titled, "a global prospective by WHO and World Organization of Family Doctors (Wonca) 2008", by Dr. Margaret Chan, who is Director-General of WHO. This report clearly elaborates the state of mental health globally. He says that mental disorders are found in each and every country, in both the genders, among have and have not, at different stages of our life and above all in both rural and urban settings, but the agony is these are overlooked at primary care centers. On the other hand this integration will only help these services which are person-centered and as well as holistic in nature. This is in true spirit to infamous "Alma Ata Declaration."

The misconceptions to understand the mental problems and its subsequent management have led to this level of neglect, e.g. general perception in the society is that mental disorders do affect only to a limited number of people, but fact of the matter is that as high as 60% of those approaching PCC are having some mental health issue. Many people believe mental problems are not treatable, but reality is efficient treatments can successfully be done at primary care. Another misconception is that the patients having some mental ailment are violent in nature or are always unstable and therefore must be kept under lock, but reality is most of these types of patients are non-violent and live very productively in the society.

According to Medicine Plus (2015), mental health is inclusive of psychological & social well-being. Mental health includes our perception, thought process and also how we are able to manage life. The mental health also affect as how we handle our stressful stimulus or stress, and whether we are able to cope up with it and how we make choices or alternatives to overcome such stress. The concept of mental health is an important part from the period of being childhood to adulthood.

According to The World Health Organization (2001) mental health includes "subjective well-being, perceived self-efficacy, autonomy, competence, intergenerational dependence, and self actualization of one's intellectual and emotional potential, among others". The good mental health comprises of well-being, having good authoritative quality, skillful, having faith in self and to achieve and live the life to the fullest. The prevalence of mental disorders among women and men has been found to be almost the same. However, many studies show the presence of depression in women is higher than males, with a ratio ranging from 1.5:1 &2:1. Not only depression, high rates are also present in most anxieties and also in some of the eating disorders. On the other hand, males are having more rates of attention deficit or hyperactivity disorder.

According to Cramer (1995), mental health is the mental attitude and the adjustment of an individual to accept the behavior through the interactions with the others in a social circle or social environment. Hales and Hales (1995), defines mental health as the ability of a person to think in a rational and logical way, and also have the ability to cope up with the changes and stress that one experiences in life and to get stable emotionally and always looking for the growth. According to the online article of Mental Health America (2000) on the workplace wellness, there are few points that are important to have good level of wellness at workplace, like productive atmosphere, livable wages, health and other environmental plans and most importantly work and life balance.

Paulo and Paulo, throw some light on mental health by adding that mental disorders are having much prevalence in society and it makes a significant amount of patients a reason to consult their family physicians. It's estimated that about 25 to 30% consultations of a physicians are related to mental disorders only. Diagnosing a mental disorder patient is a difficult task. Lack of time for the patient and lack of specific skill are considered being the two main reasons for this.

Let us consider the mental health care scenario in India. The newly passed act in "Mental Health Care Act 2017", which was cleared on 7<sup>th</sup> April 2017, is going to be a turning point in India. The law was described as "An Act to provide for mental healthcare and services for persons with mental health illness and to protect, promote and fulfill the rights of such persons during delivery of mental healthcare and services and for matters connected therewith or incidental thereto. This Act superseded the previously existing the Mental Health Act, 1987 that was passed on 22 May 1987."

The "Mental Health Care Act 2017" makes it mandatory for all those institutions dealing with mental health tissues to get themselves registered for the regulation of the sector. This act also ensures that patients having any mental illness should not travel a long distance for the treatment. For this setting up of required number of establishment providing mental health treatment are being proposed. Mental health review board, will be the body which will regulate and review all these facilities.

The 2018 National Budget the government increased health allocation marginally from Rs. 51550 crore (2017-18) to Rs. 52850 crore. After passing the Mental Act 2017, hopefully a large portion will be dedicated for the mental health. India with second highest population is having maximum number of mentally ill persons who require long term treatment. Gap between resources and the requirements will continue to remain very broad because less than 10 % beds are available for the patients which need proper hospitalisation for their mental problems. To make the things worst, only one psychiatrist is available in India for the population of one lakh. (Trivedi, 2002).Choudhry and Mishra 2009)

Two significant developments happened in India; first was "National Mental Health Program" which started in 1982, second was the reconsideration of "National Health Policy". These two laid the foundation for the integrating mental health in PCCs. It was "National Health Policy" which in year 2002 advocated the idea of adding mental health in general health services.

The "National Mental Health Program introduced following four service avenues at different levels:

- 1. Primary care services at rural area
- 2. Primary care centers
- 3. District hospitals
- 4. Psychiatric units in medical colleges.

To set ball rolling, in 1982, National Institute of Mental Health and Neuro-Sciences", in collaborating with "Director of medical services and district administration in the State of Karnataka", did a pilot study of this integration in Karnataka's Bellary District, and turned out to be a great success. The Indian government later embraced this concept for widespread integrating services related to mental health at primary care. "District Mental Health Program" was started in 1995. It was an essential part of "National Mental Health Plan", and in 2007-2012 program was made available at all the districts of India. The main idea behind this model was to integrate the "mental health at primary care level", but in spite of all the best efforts, it was not implemented in all the districts as was planned.

.

In 2017-18, the total spending on health ministry was 2.4 % of the total budget, but presently it was declined to 2.1 %. As per National health Policy, the total allocation of the budget should be 2.5 % of the national GDP.

### 1.3 (a) Mental health -- The Indian scenario

"Mental illness is nothing to be ashamed of, but stigma and bias shame us all."-Bill Clinton

Singh (2018) said that DMHP i.e. District Mental Health Program was initiated under NMHP i.e. National Mental Health Program not only to decentralise the services meant for mental health but to offer the same services at primary level, and only way suggested for this is by assimilating the general health system with mental health. There are only few developing countries who took the initiative to start this program and India is one of those few selected countries.

To get objective of the program achieved, the decision had taken to intensify workforce, training programs for medicos working in mental health, and above all integrating physical health and mental one. In order to achieve this, few pilot studies started in Bellary in the state of Karnataka. This model validated he idea that general practitioners can get the training

under the supervision not only to identify but for the management of certain types of mental disorders, apart from their normal clinical practice.

In a national survey, NIMHANS found a very wide gap in the treatment of common mental problems, and gap is up to 85%. In a report published in Times of India, on 22<sup>nd</sup> October 2016, Dr. D. Ram, who served as director central institute of psychiatry, expressed his views by adding thirteen per cent Indians suffer from some mental problem or the other. Another point he highlighted was the low number of professional in India, working under mental health care. These data of these findings was collected from a first of its kind large national survey conducted in twelve states, and these large states were covering about sixty per cent of Indian population. This report was suggesting that from age of eighteen and above, 10.6 per cent population had some type of mental illness.

In another report published by Hindustan Times, on twelve July 2015, Dr. Nimesh Desai, Director IHBAS, wrote the following words. "Mental disorders can be grouped into two broad categories-severe mental disorder, such as schizophrenia and bipolar disorder, and common mental disorder (CMD) such as depression and anxiety". He was of the opinion that from the last so many years there is no variation in prevalence of major mental problems for these problems are genetic based. But on other hand, the CMDs keep on changing as per the atmosphere and circumstances where one is residing.

Chisholm (1954), who was the first Director-General of WHO, had declared way back in 1954 that there lies no physical health exists without mental health. From 67 years now, and there is no much change in the scenario. Out of all the disease globally, almost 14% diseases are in of neuro-psychiatric-disorders. This level of mental problems is most likely less reported for there are many clinical presentations of mental disorders which are being addressed as physical disorders. Mental health is a matter of concern across the globe and India is also progressing very fast to embrace it. If we evaluate developments in sphere of mental health, speed is slow. (Srivastava, K. et al. 2016)

Chadda (2016) from department of Psychiatry, AIIMS (New Delhi, who is also the editor of Indian Medical Journal, says that it is important to mention here that since 2010, new cases of HIV infections have declined by forty six per cent and deaths happened because of AIDS related deaths in India declined by twenty two per cent due to best planned program for HIV and AIDS. These two problems are equally traumatic as mental disorders, but a lot of planning still needed for the awareness of mental disorder. If we can reduce new HIV

infections from 150000 cases in 2005 to 80000 in 2016, we certainly can have the same results in preventing mental disorder in India.

For instance, falling in the reported cases of HIV and decrease in the mortality rate because of AIDS. Social awareness on mental issues causing health problems must be started by focusing on school and other educational institutions. Also including sustained efforts at service development and planning budget allocation for mental health. It should be feasible to meet the challenges of youth mental health in low& middle income families.

A very important & relevant article by the name of "The burden of mental disorders across the states of India" was published in December 2019 edition of Lancet Psychiatry. This project was funded by "Bill & Melinda Gates Foundation", and Govt. of India's "Indian council of medical research". This report published prevalence of all the different mental disorder from the year 1990 to 2017. And its findings are very interesting. In 2017, about 9.73 crores people had mental problems in India, including 4.57 crore with depression related problems and 4.49 crore with anxiety related problems. The report further states that in the year 2017, one out of seven Indians was suffering from different level of mental issues with directly proportional to severity. The comparative mental contribution of disorders to total diseases in India since 1990 has zoomed to a faster rate. The existing variations occur due to burden from different states of mental disorders from time to time.

Kaur (2017) in her paper on mental illness in India said that in order to acknowledge the rising pattern of mental health problems, firstly we should acknowledge the fact that mental health in India is in a very pathetic condition. The cause behind this rising pattern is stress and strain of modern life style, as per the learned author, because evolutionary man is not designed to deal with all these types of stresses. Just like any physical problem, mental problem should be takes as that, it must not be taken as a matter of shame. To overcome this stigma, more emphasis has been given to increase public's awareness. The de-criminalisation of suicide as per the "Mental Health Care Bill 2016" is being considered as a welcome step. Even the scenario of the Indian armed forces is not the different. The same level of stress and mental health problems are prevalent there as it is in the civil society. It is important to train Armed forces with skills to deal with stress. Counselors must be included in the armed forces. Counseling services, if required should seek help from outside on a part-time basis.

Ziegeret et al. (2017) conducted a survey in five metro cities in India to get some knowledge about the social attitude toward psychiatrists & their medication. The collected data revealed

that an attitude is all together negative in urban areas of India toward psychiatrists and psychiatric medication. Proactive measures are needed to uplift the image of psychiatrist and its related cure and treatments which will fulfill, and fill the treatment gap in mental health. Not very positive attitudes for the psychiatrists were seen in lower age group as well as lower education group and also in the society having strong religious beliefs. The distribution of allocated fundson mental health care is very unequal between countries having high- and low-incomes. In low and middle-income nations, an average of 76 percent to 85 percent people with serious mental problems received no treatment for their illnesses. With only 0.3 psychiatrists available per 100,000 people in India with hundred and thirty crorepopulation, this statistic is significantly lower. Because of the low availability of psychologists & nurses (0.07 per 100,000& (0.1 per 100,000 respectively) working in mental health care, India has a larger treatment gap.

Keles et al. (2020) say that our daily lives are becoming more and more complex due to online social media further more leading to mental health issues in younger age group. This includes mental health problems like depression, anxiety and psychological distress in adolescents. All domains were having strong correlation with depression, anxiety and psychological distress. Findings were classified into different four domains of social media, the first is time spent, second activity, third is investment and fourth is addiction. However, there are some cautions, due to some limitations, like methodological limitations of cross-sectional design, sampling and measures. The role of social media on mental health must be explored by longitudinal cohort studies involving the mechanism of the presumed effects.

Srivastava et al. (2016) concluded that the time has come for the new and noval methods to handle mental health problems because the old strategies aimed to boost mental health have failed during the past six decades or more in developing countries. The wide awareness on mental health is required to end the menace. Along with it some progressive policies by the government which must be based on valid evidence based approaches coupled with engaged media and some vibrant educational approach can work together in dispelling the blight of mental illnesses.

Depression is a serious health issue that is frequently found in primary care settings. More than eight million doctors' visits for depression are made each year in the United States, with over fifty percent of them occurring in PCCs. Similarly, in United Kingdom, it is estimated that more than one-third of visits to GPs include a mental health issue, with about 90% of patients getting mental health treatment in primary care setup. (Ramanuj & Ferenchick (2019).

### 1.3(B) Prevalence of mental health problems

No exact data is available showing the prevalence of mental disorder at national level. WHO report, a meta-analysis was done of 13 epidemiological studies, and that indicated prevalence rate of 5.8%. An estimated data released by Indian government says that about 10-20 million (1% to 2%) of Indian population was having major mental health problems and around 5 percent i.e. about 50 million, suffered from minor mental disorders. Morbidity factors were also analyzed which showed an association of mental disorders with urban population, female gender, 35-44 years age group, having married/widowed/divorced, regardless of relationship status, lower socioeconomic status and nuclear families.

Zieger et al. (2017) were of the opinion that around 150 million Indians require psychiatric therapy. Psychiatrists working in India are treating only 10% of individuals who require mental care, according to research. Patients turn to "general practitioners, faith healers, alternative medicine practitioners, and primary health-care professionals" for support. According to comprehensive research undertaken in India, only a small fraction of people with psychiatric issues contact a psychiatrist when their symptoms first appear. While prior research put India's rate at 6.5 percent, the current data suggests it could be substantially higher, at 10.6 percent.

More et al. (2015) says that disturbed sleep (75.83%), Acidity (42.08%), Anxiety (37.91%), were the common psycho-somatic disorders along with Headache and Depression among participants. To study prevalence of psychosomatic diseases among police personnel, this cross sectional study revealed significant association of acidity & hypertension.

### 1.3 Common Mental Health Problems:

### **1.3.1 ANXIETY**

The word anxiety is derived from the "anxietas" which is a Latin word, meaning to choke, trouble& upset. Basically, anxiety is affective & cognitive responses to perceived danger, &is being considered as normal human emotion which stimulates anticipatory & adaptive response to those events which are challenging or stressful. But in its excess form it can destabilize an individual resulting in his dysfunctional state of mind. On the other hand occurrence of anxiety in absence of any challenge or stress, it is considered pathological and can leads to psychological, social, occupational, biological, and other impairment.

Anxiety is an emotion which is considered to exist as earlier as history of mankind. Its existence in human beings, and its manifestation in different range of disorders, is making it an important in clinic's focusing studies. A significant advancement has been developed to understand anxiety disorders in the last few decades. Advancement in both pharmacotherapy as well as psychotherapy in dealing in these disorders has given a new hope to the patients undergoing anxiety disorders.

GAD is anxiety disorder most commonly seen in general practice and its prevalence is seen particularly among older adults. With many physical symptoms and persistent worries lasting for a period of minimum of 6 months makes it complicated in terms of its diagnosis.

GAD is the condition which is characterized by excessive and persistent too much worrying, regarding certain number of activities and events. One of the core feature and hardest to treat of GAD is worry, and this worry causes a lot of distress and impairment in all spheres of daily life of the patient. A lot of somatic symptoms in GAD are coupled with presence of worry. But to make the diagnosis of GAD, three of the following symptoms must be there: Palpitation, restlessness, lack of concentrate, irritability, fatigue, tension and disturbing sleep pattern. GAD, which usually is having a long-term course, is being associated with waxing and waning symptoms also. In most cases, GAD continues to exist for many years before it is actually recognized and treated effectively. Patients suffering from GAD are more prone to having some serious impairments in their social, occupational, and educational fields and thus having greater need for psychological treatment. Major depression, which is common co morbidity, further complicates the treatment. There is one more interesting finding; if any medical condition is associated with GAD, its prognosis becomes worse.

There are many studies to prove that GAD is difficult to identify in general practice. The reason behind this phenomenon is that patients complaint of their physical (somatic) complaints only, as these are their main concern. They hardly present directly with their anxiety complaints. Some experts also suggest that patients avoid discussing their anxiety, openly with family physicians because of the related stigma. There are also the patients who believe there is no link between their physical complaints with anxiety and that's why they avoid revealing it to doctors.

Sheth et al. (2010) in the paper on "anxiety disorders in ancient Indian literature" had put some light on historical depiction of anxiety disorders in India. It says that even in the ancient scriptures, the symptoms of mental disorders have been discussed. In the Ramayana, Marrich is described in detail as he was experiencing some hyper arousal and re-experiencing of events along with avoidance. In epic written by "Maharshi Ved Vyasa" in Shrimad Bhagavatam around 400 bc, generalized anxiety disorder (GAD) developed in the character of King Kansha when he was threatened by Lord Krishna which included symptoms of too much worry, hard to concentration, and sleeping pattern disturbances.

Shoib and Setetal (2016) says that, the hypothalamic-pituitary-thyroidal axis is associated with anxiety like depression while psychiatric disorders manifest and look like the symptoms of endocrinological disorders. With this in mind, correlation between depression and anxiety was studied in different endocrinogical disorders.

### 1.3.1.1 Types of Anxiety Disorders

Following are different types of anxiety disorders & their clinical signs:

**Generalized anxiety disorder** – It is not easy for the patient to control the too much worry relating to event or activities. The main characteristic feature is having excessive worry and anxiety which is troubling the patients often for a period of at least 6 months.

**Panic attack** – It is being characterised by immense fear or intense discomfort in absence of actual danger. Like there can be symptoms like palpitations but it will be without any cardiac or other disease. Same will be true for other symptoms like chest pain, trembling, shortness of breath, lose of control, feeling of choking or fear of death.

**Panic disorder** – it is presented with recurrent and unexpected panic attacks.

**Agoraphobia** – It is that anxiety in which one find being in a situation or places from where escape might be difficult or there will be no help available at the time of its manifestation, getting a panic attack or symptoms like of some panic attack.

**Specific phobias** – As the name suggest, the classical manifestation is clearly apparent, limited to specific objects or situations

**Social anxiety disorder** – This type of phobia in which embarrassment may occur is having an essential feature of marked &continuous fear of social performance.

**Substance-induced anxiety disorder** — It is drug induced characterised by prominent symptoms of anxiety or panic that are related to drug-abuse, taking medication, exposure to a toxic substance or withdrawal from drugs.

**Anxiety disorder due to medical conditions** - It includes prominent symptoms resulting from a physical health condition leading to symptoms of anxiety or panic.

### 1.3.1.2 Prevalence of Anxiety

### Occurrence of anxiety disorders in India

In India, three large meta-analyses of psychiatric epidemiology research have been conducted. Reddy & Shekhar conducted a meta-analysis that included 13 trials with total sample size of 33572 people. Neurotic disorders were found to have the greatest incidence rate in the study, at 20.7 percent (18.7 percent to 22.7 percent).

It is interesting to note that out of neurotic disorders studied, only phobia &G.A.D. are integrated under anxiety disorders. It was done as per present DSM-5 criteria. It was also observed that urban population was having high pervasiveness rates (35.7% vs13.9%;) than rural population. The second meta-analysis study performed by Ganguli (2000) 15 different epidemiological studies were analyzed. Madhav's third meta-analysis comprised ten papers and found that the prevalence of anxiety neurosis was similar (18.5 in population of one thousand. These findings are similar to those of global research, which found that current prevalence estimates across forty four nations ranging from 0.9 percent to 28.3 percent, with a global pervasiveness of 7.3 percent.

Periyanayagam & Natarajan (2020) concluded their study with the finding that the proportion of anxiety disorder is highest in patients seeking consultations in cardiac department. There is a necessity to uplift knowledge of psychiatry amongst the doctors specially GPs and cardiologists holding outpatient care. It will help them to examine patients perfectly for psychiatric illness and if needed refer the patients for seeking expert opinion of psychiatrist.

Asha et al. (2019) concluded their study at the outpatient clinics of Department of ENT, Government Medical College, which is tertiary referral centre in Kerala, India with the findings that high prevalence of anxiety is noticed among patients with Meniere's disease and migrainous vertigo. Specialists and general practitioners should be aware and sensitive to the presence of anxiety among patients with vertigo. Identification and appropriate management of mental health disorders to address the disability along with poor quality of life along with extended course is an integral part of management.

There lies a limited literature which reviews the load of mental disorders among elderly people who are having some non-communicable diseases (NCDs). Verma M. et al. (2019) conducted one study to determine prevalence of depression and GAD in the senior population with diabetes and/or hypertension, as well as risk factors for psychiatric illness. A total of 320 people took part in the cross-sectional investigation. The findings revealed that G.A.D. was present in up to 38.7% of the population, with 19.7% scoring in the severe range. GAD and depression were detected in 37.8% of the people. Female gender, nuclear family, low-income status, and hypertension, have all been risk factors to depression and GAD.

Hills et al. (2019) found that anxiety and its symptoms have a significant impact on many older people of Australia and symbolise a substantial public health concern. Routine screening for clinically important anxiety symptoms in the elderly will allow for the execution of early intervention measures, the implementation of suitable therapy earlier, and a reduction in the risk of developing more serious or long-term morbidity. Psychiatric co-morbidities in a cardiovascular condition have been in an increasing ratio. Psychiatric problems like depression and anxiety work as another extra risk for heart diseases. As the result, the co-existence of this physical & psychiatric illness further influence the course &prognosis of these two conditions in a negative way. In 2001 Bikaner (India) conducted study, diagnosable psychological illness was found to be widespread (75 percent) among patients attending cardiac outpatient departments. Depressive illness was the most prevalent diagnosis (38.67 percent), followed by panic disorder (38.10 percent). The study was having an aim to assess

ratio of psychiatric morbidity among patients visiting a tertiary care center's cardiology outpatient department. This is a cross-sectional study Convenient sampling technique was used. The intend of study was to discover prevalence of psychiatric morbidity in patients attending the cardiology OPD. This will aid in the timely diagnosis & treatment of various "non-cardiac psychiatric problems", thereby lowering mortality, improving quality of life, & hastening recovery of patients having heart ailments.

As per the WMH Survey conducted by **Sagar et al.(2017)** with a concluding sample size of 24,371 individuals, revealed that in comparison with males, the episodes of GAD were as high as double (4.42% vs. 2.44%) & pervasiveness of mood disorders found to be 1.6 times elevated in women. Anxiety disorders (3.41 percent) was commonest in the previous year, next to depression disorders (1.44 percent). Specific phobias were most prevalent anxiety condition, while depressive episodes were most common mood disorders discovered in the study.

**Sideeq et al. (2017)** did a research on the occurrence of generalized anxiety disorder. The prevalence was to study among the patients who were attending a peripheral clinic in Kashmir valley. The study concluded with the findings which states that the prevalence of GAD in that urban based population of the Kashmir valley is approximately equal to the level of the prevalence at national level. The number of assessed patients were 1553, and out of this only 0.96% i.e. 15 patients were having generalized anxiety disorder according to DSM 5. Among these anxious patients, 86% were females. From the total sample, about  $2/3^{\rm rd}$  patients belonged to class II socioeconomic status.

**Abdulbari et al.** (2013) studied the prevalence and overlapping of somatization, anxiety, depression & stress in a primary care population. In that cross-sectional study, 2150 patients sampling was taken in primary care setting. Among the studied sample, 11.7% were of somatization, 11.3 % were having anxiety and 8.3% were of depression. The four problems were very similar in males &females: depression (11.3 percent versus 11.3 percent), anxiety (7.7% versus 8.9%) and somatization (12.5% versus 10.7%) as a specific gender prevalence. Psychological disorders were found to rise with advancing age, and its peak comes in age group of 45–54 years. High rate comorbidity of somatisation, depression, anxiety was also noticed. Data was suggested of a strong relation in these psychological problems in patients.

### 1.3.2 Depression

Thai and Nguyen (2018) stated that depression is serious & common mental health condition. About 450 million people are living with depression around the world. Depression generally starts in youth age, sometime long-lasting, recurrent, &may be in severe form, and may lead to suicide. Depression is curable, but very less number of the patients, in many countries, less than 10%, get the treatment. Access to getting treatment for mental disorders &depression is hampered by a lack of resources, psychiatric services, societal stigma, & a lack of mental health literacy (MHL) and awareness.

The term "depression" refers to a range of symptoms that range from a normal mood that affects practically everyone from time to time to a serious disorder. The lowering of mood, which can be accompanied by tearfulness and a lack of ability to take interest in or pleasure from one's typical activities, is a common aspect of all depressed illnesses. The lowering of one's mood is a common aspect of all depressive disorders, which can be accompanied by tearfulness and an inability to take pleasure in or enjoy one's typical activities when severe. As depressions become more severe and pathological to the point of becoming a psychiatric disorder, the disturbance becomes more pervasive, and a variety of other symptoms emerge. In almost every case, there is a distinct way of thinking, characterised by persistent negative attitudes, which may include feelings of personal worthlessness and incapacity, remorse over previous deeds, and a pessimistic outlook on the future. Self-harming ideas emerge, as do thoughts of suicide, with the prospect of committing suicide or attempting suicide.

Disturbances of sleep and appetite are common, varying from high to low. Other somatic symptoms include mood swings during the day, a lack of energy, slowed physical movement and speech, and worries or a solid feeling that you have a physical illness. There is a loss of concentration, which leads to a loss of ability to function at job, which leads to a loss of personal relationships. Depressive disorders is having a number of origins which includes big stressful events, devoid of social support, physical diseases, environmental factors and even some genetic factors.

The "Diagnostic and Statistical Manual of Mental Disorders, 5th edition", offers a number of new and critical improvements for identifying major depression (sometimes called clinical depression) and depressive disorders. Dysthymia is no longer a thing, having been replaced with "chronic depressive condition."Both the conditions—"major depressive disorder and the prior dysthymic disorder"—are included in this new language. This adjustment was necessary because there were no scientifically significant differences between the two circumstances.

It's a new condition in the DSM-5 that addresses symptoms that were previously classified as "childhood bipolar disorder" before the publication of the DSM-5. This diagnosis can be made in youngsters under the age of 18 who exhibit irritation and out-of-control behavior on a regular basis.

Given the prevalence of clinical depression, or major depressive disorder, as the DSM has historically referred to it, it would be prudent to keep alterations to this widely used diagnostic to a minimum. As a result, the American Psychological Association (APA) has showed prudence by not modifying any of the basic criteria for serious depression symptoms, nor the two-week time limit for diagnosis.

Vikram (2017) did a brief psychological interventional treatment called "Healthy Activity Program (HAP)", for 495 individuals with moderate to severe depression at PCCs. Delivery of this intervention was laid by lay counselors. In the treatment of depression, HAP provided by non-specialist health providers in ordinary primary care settings is effective.

Premenstrual Dysphoric Disorder is now a DSM-5 diagnosis. The symptom criteria appear to be identical to those in the DSM-5's draft revision. Shoib (2016) concluded that depression, like anxiety, is often linked to the hypothalamic-pituitary-thyroid axis's function. Endocrinological illnesses and psychiatric disorders have a lot of symptoms in common. We investigated depression and anxiety in several endocrinological illnesses with this background in mind. According to a recent World Health Organization research, India has about 56 million people having depression and 38 million of anxiety disorders, making it world's sixth most depressed country.

### 1.3.2.1 Changes in Depressive Disorders from DSM-IV to DMS V

Many depressive disorders have been added to DSM-5, including "Premenstrual dysphoric disorder" and "disruptive mood dysregulation disorder." For children under the age of 18, the term "disruptive mood dysregulation disorder" is used. Children with repeated episodes of chronic irritation and significant behavioral dyscontrol were occasionally misdiagnosed as bipolar disorder patients. Overtreatment is the result of this. This new diagnosis is now included in DSM-5 to eliminate this difficulty.

In DSM-4, what was formerly known as 'Dysthymia' is now classified as Persistent Depressive Disorder. 5. In DSM-4, there was just one unique criteria for "major depressive episode," which applicable to depressed symptoms which last less than two months after

death of some beloved fellow. This exclusiveness is no longer included in DSM5.

### Depressive Disorders Included in DSM 5;

"Major Depressive Disorder

Persistent Depressive Disorder (Dysthymia)

Premenstrual Dysphoric Disorder

Substance/Medication-Induced Depressive Disorder

Depressive Disorder due to another Medical condition

Other Specified Depressive Disorder

Unspecified Depressive Disorder"

What differ among all these disorders are issues of duration, timing, or presumed etiology.

### 1.3.2.2 Prevalence of Depression in India

Asha et al. (2019) ended their investigation at the outpatient clinics of the Department of ENT, Government Medical College, a tertiary referral center in Kerala, India, with the findings that patients with Meniere's disease and migrainous vertigo have a significant prevalence of depression. Patients with vertigo should be aware of and attentive to the presence of depression, according to specialists and general practitioners. One of the most significant aspects of management is identifying and then managing concomitant mental health disorders in order to address the impairment and low quality of life. The burden of mental illnesses among elderly people with non-communicable diseases is poorly understood, according to the literature (NCDs).

Verma et al. (2019) did a study to know prevalence of GAD and depression in older patients with "diabetes and/or hypertension", as well as risk factors for psychiatric illness. A total of 320 people took part in the cross-sectional investigation. The findings suggest that 58.1 percent of research participants experienced depression, with 34.1 percent having severe depression. GAD and depression were detected in 37.8% of the people. Female gender, nuclear family, low-income status, and concomitant non-communicable diseases (NCDs), particularly hypertension, have all been linked to depression.

According to Grover et al. (2018), roughly 30% of 1607 participants in a cross-sectional study had depression, as measured by the PHQ-9. The most disturbing conclusion was that 16.7% of these people had suicidal thoughts. According to this survey, a large number of doctors in India suffer from depression, stress, and burnout. These psychological issues are also linked

to extended work schedules, unfavorable patient outcomes, and negative interpersonal as well as patient-doctor relationships.

Indu et al. (2017) are of the opinion that in primary care, depression and attempts for suicide, are both widespread. Most important indicator of suicide attempt is depression. This study looked at 827 patients who went to their doctor for a non-mental health issue. Patients who were using psychotropic medications were not part of this study. The study's goal was to see how common depression and previous suicide attempts were among adult outpatients in primary care. The total prevalence of depression was found to be 27.2 percent in the study, and it was shown to be greater in women. In 6.9% of OPD cases, there had been a previous attempt at suicide. This percentage was higher in women (9.2%) than in males (3.6 percent). 21.3 percent of people with depression tried suicide before, compared to 1.5 percent of those without depression. In individuals who had attempted suicide before, the prevalence of current depression was 81 percent (severe depression, 61 percent).

Carey et al. (2014) studied the prevalence of depression and obesity comorbidity by gathering data from 3361 patients. Weight of the patient &depression have a U-shaped association, according to this cross-sectional survey, with a higher prevalence of depression among underweight and obese general practice patients. These findings should be considered red flags for depression screening in general practice.

In a primary care population, Abdulbari et al. (2013) investigated the occurrence and overlap of somatisation, depression, anxiety, and stress. Total 2150 individuals were enrolled in a "cross-sectional study", which was performed in a PCC. 11.7 percent of the people in the study had somatisation, 11.3 percent had anxiety, and 8.3 percent had depression. Men and women had nearly identical rates of these four psychological disorders: depression (11.3 percent vs 11.3 percent), anxiety (7.7 percent vs 8.9 percent), and somatisation (7.7% vs 8.9%). Psychological disorders have been reported to grow with age, with peak in 45–54 year age group. Males, patients having secondary education, and the elderly were the high-risk groups. The findings revealed a close link between these psychological problems and the patients.

Srinivasanet al. (2006) observed 12,886 patients of a PCC in South India, participated in survey under community mental health program, and discovered that "major depressive disorder and dysthymia" were prevalent in thirty four percent & twenty two percent of overall

burden of mental disease, respectively. Despite the fact that depression may be treated well in primary care centers in 60-80% of instances, only 10 to 25% of people seek therapy. It's due to a lack of understanding and stigma.

### 1.3.3 SOMATIC SYMPTOM DISORDER

The category of "Somatic Symptom Disorder and Other Related Disorders" in the newest "Diagnostic and Statistical Manual for Mental Disorders, Fifth Edition' (DSM-5)" represent a set of disorders characterised by thoughts, feelings, & all other behaviours that are related to somatic symptoms. Somatic symptoms can be perceived as extreme for any other medical illness that may be present, hence this group exclusively represents psychiatric problems. Medical professionals are challenged by "Somatic Symptom Disorders and Other Related Disorders".

Physicians must determine the involvement of all psychological elements that contribute to somatic complaints. A physician's attention may be drawn to a somatic symptom when the true cause of the impairment is somatic symptom disorder. Physical symptoms are common in anxiety disorders and mood disorders. Before diagnosing a "somatic symptom disorder", physicians must rule out other main psychiatric problems that can be presented with similar somatic symptoms that improve markedly with treatment of anxiety/ mood problem.

DSM-5 includes 5 exact diagnoses in "Somatic Symptom Disorder and Other Related Disorder category.

Specific Somatic Symptom Disorders diagnoses is inclusive of:

- (1) Somatic symptom disorder
- (2) Conversion disorder
- (3) Psychological factors affecting a medical condition
- (4) Factitious disorder
- (5) Other specific and nonspecific somatic symptom disorders."

A number of significant changes are brought in the fifth edition of DSM. "Somatic Symptom Disorder and Other Related Disorder" was earlier known as 'Somatoform disorder' in the text edition of DSM 4. C Thus somatization disorder is replaced by "Somatic Symptom Disorder and Other Related Disorder" in the latest version of DSM. There were few conditions which were listed in the category of "Somatic Symptom Disorder and Other Related Disorder", like

body dysmorphic disorder, pain disorder and Hypochondriasis. All these conditions have been removed. Few medical conditions and other factitious disorder, which are being influenced by some psychological factors, are also included in the newly formed "Somatic Symptom Disorders" category.

Following the publishing of "Diagnostic and Statistical Manual of Mental Disorders, 5th edition, somatoform disorder is now known as 'Somatic symptom and related disorders." Main goal of this shift was to make somatic symptoms more relevant in primary care settings. The patient's primary concern is his physical symptoms, which he attributes to a non-psychiatric illness. The issue arises when the treating physician treats symptoms that are not caused by a biological condition while neglecting the underlying sickness. Patients having SSD can become subject to needless blood tests & other diagnostic treatments. Good diagnosis is required to solve all of these issues. Psychological screening techniques can help confirm the presence of SSD in these patients.

If we talk about the most common categories of patient visiting PCC, it is "somatic symptom disorder" as its prevalence in general population is about 5% to 7%. And out of patients who presented with "acute somatic symptoms", about 20-25% had developed chronic somatic illness. The symptoms can start during childhood or adulthood. Women generally presented with SSD more than men, with probable male-female ratio of 1:10.

### Somatic Symptom Disorder Diagnostic criteria, as per "DSM 5

- **A.** One or more somatic symptoms that are distressing or result in significant disruption of daily life.
- **B.** Excessive thoughts, feelings, or behaviors related to the somatic symptoms or associated health concerns as manifested by at least one of the following:
- 1. Disproportionate and persistent thoughts about the seriousness of one's symptoms.
- 2. Persistently high level of anxiety about health or symptoms.
- 3. Excessive time and energy devoted to these symptoms or health concerns.
- C. Although any one somatic symptom may not be continuously present, the state of being symptomatic is persistent (typically more than 6 months).

### **Specify if:**

With predominant pain (previously pain disorder): This specifier is for individuals whose somatic symptoms predominantly involve pain.

### **Specify if:**

**Persistent**: A persistent course is characterized by severe symptoms, marked impairment, and long duration (more than 6 months).

Specify current severity:

**Mild**: Only one of the symptoms specified in Criterion B is fulfilled.

Moderate: Two or more of the symptoms specified in Criterion B are fulfilled.

**Severe:** Two or more of the symptoms specified in Criterion B are fulfilled,

plus there are multiple somatic complaints". (or presence of only one severe somatic symptom).

Liao . et al. (2019) investigated quality of life (QOL) of patients having SSD, as well as relationship with concomitant depression. Patients having "somatic symptoms" have lower functioning and QOL, however key reasons that are thought to be responsible for these impairments differ between research. Independent t-tests were used to analyze group differences using a sample of 107 patients having "somatic symptom disorder" and many types of self-reported instruments. Depression is linked to functioning and QOL in SSD patients, according to the findings of the study. This research attempted to create a more comprehensive picture of SSD functionality and quality of life. According to the findings, SSD sufferers have decreased functioning and a bad quality of life.

Bizzi et al. (2018) completed some child research as well. 131 children with "somatic symptom disorders" and "disruptive behavior disorders" were evaluated for attachment and refective functioning. The researchers wanted to see if children with "somatic symptom disorders (SSD)" and "disruptive behavior disorders (DBD)" are having more insecurity or disordered attachment and issues than a control group. Cozz and Barbi (2018), defined "Somatic symptom disorder as a condition in which a patient's physical symptoms are always associated with disruption of day-to-day functioning, distress, or disproportionate thoughts, feelings, and behaviors regarding the symptoms, whether or not they are associated with an identified medical condition". While SSD affects a significant number of kids & adolescents who present to emergency department, it got little attention in the literature, and there is little formal training or guidance on how to care for afflicted patients in emergency. Emergency

physicians should use these symptoms to determine the diagnosis of somatic symptom disorder with the help of the patient.

Kim et al. in 2019 suggested that "SSD may be associated with changes in sensory-discriminative processing of pain and other somatic symptoms, which is influenced by affective processing, with the goal of evaluating whether individuals with somatic symptom disorder (SSD) display increased resting-state functional connectivity (FC) within and between the sensory-motor network (SMN), default mode network (DMN), salience network, and dorsal attention network (DAN). Patients with SSD have a deficiency in attention, resulting to misperception of external stimuli and failure to regulate physical activities directed at interactions with external stimuli, according to the results of the FC analysis of the SMN and dorsal attention network (DAN)".

Cozzi et al. (2017) looked into it with the goal of quantifying the incidence of somatic pain in a "pediatric emergency department", to study how common "somatic symptom disorder" was therein children and adolescents. Patients admitted to the emergency department were studied using a prospective observational study. The research involved 713 patients who were able to meet the study's inclusion criteria. Somatic discomfort was a substantial factor to pediatric emergency room visits, according to the study, and should be investigated and identified in children who report pain. Functional pain, pediatric emergency department, somatic pain, main headache, and somatic symptom disorder are some of the key phrases.

"Somatoform disorders" are found in at least 10–15 percent of primary care patients, according to Kurt and Oberil (1998). These disorders were defined as major physical complaints that produce severe impairment of physical functioning but lack a medical explanation despite appropriate assessment. For a variety of reasons, researchers and clinicians are keen to detect such illnesses. First, in comparison to mood and anxiety disorders, the impairment of functioning & quality of life in people with somatoform disorders is substantially worse. Second, the expense of health treatment for people with somatoform diseases is substantially higher due to multiple trips to clinics, laboratory investigations, and even surgical operations. Dealing with such patients is more difficult than dealing with people with other mental illnesses. The preceding findings clearly show that physicians lack psychological expertise, and that as a result of this weakness, psychological patients are occasionally treated on a physiological basis. And, for me, this discovery serves as the impetus for pursuing this research.

### 1.3.3.1 PREVALANCE OF SSD

Psychogenic non-epileptic seizures, conversion, and somatic symptom disorders were investigated by Selim and Benbadis (2019). In this study, it was discovered that adherence to psychotherapy, specifically cognitive-behavioral therapy (CBT), was low in patients with psychogenic non-epileptic seizures (PNES), and even lower in minorities and patients with a history of abuse (compared to adherence to psychotherapy in depression, for example). Furthermore, multiple measures linked adherence to a better outcome, showing that we have an effective treatment. This should motivate us all to improve our treatment adherence.

Heart rate variability (HRV) was studied in people with somatic symptom disorder by Huang et al. (2017). The findings suggested that people with SSD have different heart rate variability (HRV) patterns.SSD has an effect on HRV, and concomitant depression plays a role in autonomic function, according to the findings. Autonomic functioning explains the various forms of SSD and hence aids in the diagnosis of the disease. The size of the association between HRV and psychological factors differs by gender, implying that sex-specific examinations of SSD patients are required. The autonomic nervous system and its activities in people with SSD as defined by "DSM-V" criteria are still poorly understood. The researchers wanted to see if persons with SSD differed from normal people in terms of heart rate variability (HRV) measurements, and if sex had a role in this relationship.

James et al. (2017) went a step further and investigated Somatic Symptom Disorder in Dermatology. They concluded that a diagnosis of somatic symptom disorder should be considered when a patient presents to a dermatology department with prominent dermal symptoms causing great distress. Basic characteristics of SSD are aberrant and excessive thoughts (e.g., persistent worry that he has got cancer), feelings (e.g. irresistible anxiety), and behaviours (e.g., constantly inspecting his skin) connected with the symptoms.SSD is also suggested by the existence of various non-dermatologic symptoms apart from cutaneous ones. Other psychiatric illnesses commonly observed in dermatology, such as "depression, anxiety disorders, obsessive compulsive disorder, delusions of parasites is, and body dysmorphic disorder", are included in the differential diagnosis. After taking a medical history, a thorough examination is performed.

Limburg et al. (2017) conducted a longitudinal study in individuals with vertigo symptoms to determine the course and determinants of "DSM-5 somatic symptom disorder". This study looked at 239 OPD patients who presented to a tertiary care neurology unit over the course of

a year. SSD was shown to be substantially more common in people with vertigo and dizzy symptoms, according to the findings. Potential predictors of SSD persistence are examined, and a focus in therapy can be chosen.

Anita (2016) looked at the prevalence of somatic complaints in adolescents and how it differed by gender and age. She finished her research by discovering that females are reporting more somatic complaints than males. Only one symptom, joint discomfort, is present, and it is more common in men.

In a primary care population, Abdulbari et al. (2013) investigated prevalence & overlapping of somatisation, anxiety, depression& stress. A total of 2150 individuals were enrolled in the "cross-sectional study", which was conducted in a PCC. 11.7 percent of the people in the study had somatization, 11.3 percent had anxiety, and 8.3 percent had depression. Men and women had nearly identical rates of depression (11.3 percent vs 11.3 percent), anxiety (7.7% compared 8.9%), and anxiety (7.7% versus 8.9%) among these four psychiatric diseases. Psychological disorders have been reported to grow with age, with a peak in 45–54 year age group. Males, patients with a secondary education, & the elderly were the high-risk groups. There was also a high risk of somatisation, depression, and anxiety comorbidity. Findings revealed a close link between these psychological problems and the patients.

### **Causes By Mayo Clinic**

Exact causes of "somatic symptom disorder" are not clearly known, but following factors may play a role.

"Genetic and biological factors, such as an increased sensitivity to pain Family influence, which may be genetic or environmental, or both.

Personality trait of negativity, which can impact how you identify and perceive illness and bodily symptoms.

Decreased awareness of or problems processing emotions, causing physical symptoms to become the focus rather than the emotional issues."

Other characteristics that contribute to somatic symptom disorder include adjustment issues, illiteracy/lack of academic education, obesity, socio-economic status, receiving long-term

therapy for another disease, sedentary lifestyle, family influence, and a negative personality feature. Reduced awareness of emotions or difficulties processing them, as well as learned behavior.

## 1.3.4 Knowledge and attitude of general practitioners towards common mental health problems

According to Loh et al. (2018), data on general practitioners' attitudes regarding depression in India is not well known. The ability to examine their knowledge and perspectives on clinical depression, diagnosis, and treatment is severely limited. Even their overall understanding of the topic and their cross-sectional study was undertaken, with data collected from 80 physicians and physician trainees recruited from community clinics in Gujarat, who were primarily non-psychiatric. Interviews were performed with 29 of the eighty practitioners to learn what they are doing in their individual practices to diagnose and treat clinical depression. Overall, the results indicated that the physician had a strong comprehension of the subject in terms of definition and therapy. However, there were certain stigmatized attitudes regarding clinical depression. These findings highlighted the possibility of some stigma among physicians, who themselves highlight the importance of overcoming physician stigma and boosting awareness of diagnosing and treating severe depression.

Pal (2018) conducted an observational study on adult male visitors at a rural primary health care clinic. Primary care physicians had shown their inability in diagnosing a large portion of depression cases. This finding highlighted the need for additional training to enhance early diagnosis and thus increasing referral rates, and found that 22.1 percent patients tested positive for PHQ-9, and 12.5 percent had MDD. Only 45 percent of cases were accurately diagnosed by primary care physicians, meaning they missed 55 percent of the time.

Sagar et al. (2017) conducted a large survey in India on prevalence and treatment gap for common mental diseases over the previous year, finding a 95 percent treatment gap, with just 5 percent people with common mental disorders getting any treatment. This study looked at prevalence & treatment of anxiety, mood, &"substance use disorders" in 24371 people in India over the course of a year. The survey looked at not only the prevalence and physical comorbidity of mental diseases, but also their functioning, correlations, and treatment visits to find a cure. The WMH survey was a collection of 29 "coordinated surveys" that use similar methodologies and questionnaires to allow for cross-national comparisons.

Shoib., et al. (2016) ended their research with the conclusion that depression and anxiety are extremely common and largely undiagnosed in primary care settings. The majority of practitioners underestimate the importance of endocrinological co morbidity in the outset, resulting in delayed diagnosis.

Choudhary and Mishra (2009) undertook an important study to learn about general practitioners' knowledge and attitudes concerning prevalent mental health problems, and they discovered some surprising results. According to the survey, the majority of "non-psychiatrist medical practitioners" (79.7%) are unaware of any diagnostic criteria and had no experience or ever trained in dealing with mental illness. Their mental patients are treated based on their own intuitions. In this study, almost all of "non-psychiatrist medical practitioners" concurred that prevalence of mental health issues was rising among public. Because information they received throughout their training time was limited for two to three weeks, the maximum (98.5 percent) of the practitioners believed that they and other practitioners needed to know more about psychiatric disorders and treatment options. According to the report, there is fewer than one psychiatrist available for every one lakh Indians, indicating that the gap between resources and needs is still too wide. Because of the large gap, the majority of psychiatric patients do not receive proper treatment and consequently continue to suffer from long-term disease, which leads to disability. Patients who are fortunate enough to seek the advice of a psychiatrist do so much later, when the disease has progressed to the point where it is chronic and resistant to treatment. Another concern is the scarcity of psychiatrists, as well as a lack of knowledge about how to recognize and treat common health problems he majority of them (79.7%) have no idea what diagnostic criteria are utilized to diagnose "mental health problems". They are aware of the etiology, rising prevalence, and treatment options for mental health issues. They provide medication and therapy to the patients, although the bulk of them have no professional training in these areas. The maximum practitioners believe that current mental health treatments were insufficient to meet people's requirements. As a result, we came to the conclusion that general practitioners need more training in dealing with patients who have mental health issues, and that existing mental health services need to be improved.

# 1.3.5 What impedes general practitioners to identify common mental health problems?

For numerous reasons, Anjana et al. (2019) found that detecting mental health disorders in primary care is difficult. For starters, the majority of patients have physical problems. Second, due to the time constraints of the appointment, underlying psychiatric illness may not be diagnosed. Patients may not be able to articulate their symptoms, thus it is up to primary care doctors to conduct a thorough clinical interview, which can take a long time.

In the second part of their study on depression in primary care, Ramanuj and Ferenchick (2019) state that the vast majority of persons with depression are getting treatment in PPCs, with estimates ranging from 64% in the United States to 90% in the United Kingdom. General practitioners have a unique position and skill set, but it is insufficient to handle mental health issues. Even when referring a patient to a specialist, general practitioners are required to provide advice. Many interventions, such as psychological, pharmaceutical, and psychosocial interventions, are available to treat patients suffering from depression, and they can be employed alone or in combination.

There is very little information on the efficiency of these interventions as treatment modules in a comparison research, but two comparative studies of psychological and pharmacological therapies separately found that they are both equally effective in primary care.

According to Zhang et al. (2019), GPs remarked and recognized that they were short on tactics and that they desired for appropriate training so that they could have enough practice. It was discovered that GPs were unable to identify the instances for two reasons. First, general practitioners were having trouble making diagnoses because they lacked the necessary expertise and confidence, and their criteria for making mental diagnoses were unclear. Second, general practitioners lacked the abilities necessary for evaluation and reevaluation. Their review revealed content and subject deficiencies, as well as a lack of mental state examination evaluation. Patients' lives are jeopardized by mental illnesses, and they sought help from their doctors, yet general practitioners, who can play a significant and valuable role in treating such patients, are underutilized.

Manjunatha et al., (2018) published a research paper titled "Designing and executing an innovative digitally driven primary care psychiatry program in India", and said that maximum patients contact their primary care doctors around the world, including India. However, the doctors only provide symptomatic alleviation to all of those patients, which is insufficient.

According to Thai and Nguyen (2018), depression was an illness that could be treated, but less fifty percent of those affected around world, and in some nations, less than 10 percent receive the attention and assistance they require. The real significant difficulties in treating mental diseases, particularly depression, include a lack of adequate resources and psychiatric treatments, along with social stigma & lack of "mental health literacy (MHL)".

# 1.3.6 Role of General Practitioners to manage common mental health problems

Anjara et al. (2019) presented a study named "Can General Practitioners Manage Mental in Primary Care?", which concluded that general practitioners in primary care clinics with the help of nurses can effectively manage mild to moderate mental health difficulties in their patients. They are able to close the mental health treatment gap by providing patients with non-stigmatizing mental health care in a community setting. Many experts have advised integrating mental health care in to primary care to close treatment gap for over a decade. Patients go to their General Practitioners (GPs) initially for advice on their mental health issues. In 2008, "World Health Organization (WHO)" launched the "Mental Health Gap Action Program (WHO mh GAP)". The initiative was designed to assist countries that are expanding their "mental health", "substance abuse", and "neurological disorders" awareness programs. Despite the fact that the initial "WHO mh GAP Intervention Guide" was correctly used by 80 countries and was translated into 20 languages, few research studies have addressed the application of mh GAP framework in LMICs, and thus highlighted the urgent need for evidence.

A recent evaluation of WHO mh GAP evidence from LMICs got 13 studies reporting health worker training utilizing the WHO mh GAP Intervention Guide, but only nine research describing WHO mh GAP framework clinical implementation in LMICs. It's worth noting that one of the research is being conducted in India.

Mohan (2015), concluded that adding investments in "Primary healthcare" in India resulted in equitable gains in "health-related behavior" and coverage of preventative measures. The Bhore Committee suggestions were used to establish the "Indian primary healthcare system" in rural regions, which consists of a network of "primary health centers (PHCs)" and "community health centers". Through different committees the "National Rural Health Mission" infused newer resources and redesigned some elements, such as raising a cadre of community volunteers (ASHAs), establishing an assured referral system, and increasing social engagement.

With a network of 150,000 "Health and Wellness Centers", the "National Health Policy 2017" and the subsequently established "Ayushman Bharat" aiming for expanding the breadth and reaching at PCCs. A group of primary care professionals, practitioners, and researchers joined hands to create important features of future "primary healthcare models" in rural and urban India that will solve these difficulties and take advantage of emerging opportunities. This article is critical because it puts forth a vision for India's primary healthcare in the future, based on experiences and data from India as well as from around the world.

Menon et al. (2017) found that patients with some unexplained somatic symptoms may have a number of consultations before being referred for mental care in their study on medical unexplained symptoms in south India. This just demonstrates the critical necessity for clinicians, particularly general practitioners, to be trained in recognizing and managing unexplained medical problems.

According to the WHO (2016) report "The Health Workforce in India" by Sudhir Anand and Victoria Fan, the national concentration of doctors of all sorts (Ayurvedic, Allopathic and Homeopathic) was 80 in the population of per 100,000 in 2001, and the density of nurses was 61 per one lac. In China, the similar figures were 148 for doctors and 103 for nursing staff. In both nations, urban concentration were higher than rural concentration, however in India, urban densities were four times higher than rural densities, whilst in China, urban densities were twice as high as rural densities.

What this demonstrated was that we were less well-equipped in terms of health personnel than China, which is not surprising given China's far larger "per capita GDP", but that the resources we did have were more unequally divided between urban and rural areas.

Murthy, of NIMHANS, Bangalore, Karnataka, India, writes in the editorial commentary of "National Mental Health Survey of India 2015–2016" that most important finding of survey for the failure of mental health programs is the treatment gap. This had significant implications for service organization. Treatment gaps for mental illnesses ranged from 70% to 92 percent for various disorders, with an average of 85% for common mental disorders & 73.6% for severe mental disorders.

# 1.3.8 Integrating mental health with primary care

Manjunatha et al., (2018) defined the term "primary care" as "the provision of healthcare not just at the point of first contact, closer to their home, but also for continuity of care afterwards." Because individuals frequently seek treatment from a nearby health-care practitioner, this is the case. Doctors, who are one of the most significant health-care providers, are recognized in India as general practitioners, family physicians, and family doctors, regardless of whether they work in government hospitals or small clinics. In developed countries, they are known as primary care physicians.

In the rural area of Karnataka, Srinivasan et al. (2018) conducted a randomized control experiment on the enhancement of mental health by integration with primary care. According to the study, people suffering from depression and anxiety are frequently underserved in resource-limited settings, such as rural India, due to shame and a lack of educated doctors and resources. The impacts of integrating patients with mental health problems and chronic illness therapy in primary health care (PHC) settings were investigated in this study, which was conducted in rural India utilizing a collaborative care paradigm for improving depression screening, diagnosis, and treatment.

These findings, if successful, will undoubtedly contribute to discipline in 5 ways: "

- 1) Expand implementation research in low-resource settings by looking at how many chronic diseases can be treated with low-cost, evidence-based solutions.
- 2) strengthen referral linkages and build the capacity of PHC staff to diagnose and treat mental illness within their existing clinic structure.
- 3) connect community members to primary care through community-based health fairs and healthy living groups;
- 4) Raise mental health awareness in society and reduce mental health stigma
- 5) Demonstrate the feasibility of scaling up and maintaining the intervention".

Jayaram et al.(2019) created "MANSI, a Sustained, Innovative, Integrated Mental Healthcare Model" in South India, which discovered that depression and anxiety were typically compounded by lacking of disease awareness. Other important causes include a lack of care provider resources, policymakers' low regard for mental health, and discrimination towards mentally ill people.

The major goal of this study is to know how female villagers and "community health workers (CHWs)" may help overcome the dearth of psychiatric resources in rural regions when it comes to treating common mental diseases. A multidisciplinary team has been formed to assess and manage rural patients falling in a South Indian PCC. A "care-delivery program was also conceived, developed, & implemented with the following goals by:

- (a) Targeting indigent women in the region;
- (b) Integrating mental health care with primary care;
- (c) Making care affordable and accessible by training local women as CHWs with ongoing supervision; (d) Long-term sustainability".

CHWs in the community acted as link between center& community.

They got required training under supervision, and taught to utilize a focused training module that will assist them in identifying common mental diseases, illness literacy & village community support by outreaching workers. Focus groups and patient training programs were conducted and employed assessment measures that were translated into the local language. As a result, people from over 150 villages in South India received mental health care. Approximately 50 villages are currently using the services on a regular basis.

Bashar et al. (2019) used their expertise of successfully "integrating mental healthcare into primary care" to address large gap in diagnosing and managing rural population suffering from depression. "Integrating mental health services into primary care" will help to close the treatment gap for mental health issues. This experience demonstrated that integration can be easily accomplished with a high degree of effectiveness, and that it can effectively solve the country's significant mental healthcare need. A depression screening cum awareness camp was arranged with the help of "district health authorities" and local government, and awareness about depression was raised, including its frequency, how to suspect it, and whom to contact. All participants were made aware that psychiatrist services are accessible at the health center. Encouragement was given to express themselves honestly and seek consultation if necessary. Following this, the town implemented community-based depression screening. All villagers over the age of 18 who came to the health center for whatever reason were screened by a doctor, who was assisted by a qualified female health worker, doing house to house visits.

Bagayogo et al. (2019) conducted a qualitative study in which they thematically analyzed three open-ended questions and discovered a variety of obstacles that PCPs experience in providing adequate care. Major challenges included a lack of time for a thorough assessment, lack of trust treating some complex mental health disorders & difficulties sending patients to mental health professionals. Furthermore, mental health difficulties hindered medical management and recovery, necessitating competent mental health management. Mental health care must be integrated into PCCs, but some practitioners found it challenging to do so owing to a lack of resources and/or a hectic schedule. Many of the professionals, on the other hand, found it enjoyable to work with patients who were suffering from mental illnesses and to assist them in finding services. Specific quotes that typify the primary concepts are included below. 62.5 percent of service providers, such as general practitioners, said they avoid discussing mental issues sometimes due to time restrictions, while 37.5 percent said they never or rarely avoid discussions despite time limits. Furthermore, despite little insurance coverage, 71.9 percent of them said they never avoid discussing psychiatric concerns with patients. In addition, 81.3 percent said they never avoid treating psychiatric symptoms because of liability concerns.

Ramanuj and Ferenchick (2019) summarize the first phase of their study on depression in primary care by stating that primary care doctors have numerous problems in responding to their patients' expanding health requirements and psychosocial complexity. They are extremely important not only in the screening and diagnosis of depression, but also in the treatment of depression. As a result, depression in primary care should be treated just like any other disorder. Primary care practitioners must be able to screen for depression and properly diagnose it in an environment where treatment and follow-up is available, thanks to system-based interventions.

In a study published in Lancet by Shidhaye, R. (2017) to see effect of "VISHRAM, a grass-roots community-based mental health program", author exposed the treatment gap in identifying and treating depression in rural India. Despite evidence that pharmaceutical and psychosocial interventions can help people with depression, most people with depression don't get them because of supply- and demand-side constraints.

A 2015 systematic review that analysed the severity of treatment gap in mental health in adults of India and China and found no research that investigated to assess the impact of "community-based mental health program" prior to this study. Another systematic review included seven studies that assessed the impact of mental health interventions, but none that

assessed community mental health initiatives in lower middle-income and low-income countries (LMIC).

PHQ-9, a questionnaire used to screen depression has been widely used and its validation is also established in India. To summarize the findings, a grassroots program managed by a team of "community health workers" and counselors, in partnership with primary care physicians and visiting psychiatrists, could help close the enormous treatment gap for depression. Pushing up this program through India's "National Mental Health Program" is now critical in translating this understanding into real-world practice.

### 1.3.9 IMPORTANCE OF PRIMARY CARE—WHO MODEL

The World Health Organization emphasized the importance of primary care in its 2008 study titled "Integrating mental health into basic care—A global viewpoint." It is certain that, today more than ever, primary care regeneration is critical. It goes on to say that vision of providing mental health by primary care has not been realised in the majority of countries. It can be caused by a variety of factors, including lack of political support, insufficient management and in some cases, policymakers' opposition. Many impoverished and developing countries lack even the most basic primary care infrastructure to provide mental health care. These countries' larger cities may have some larger hospitals giving psychiatric consultations, but treatment costs are too costly for people who are just scraping by. Another constraint is the distance between these larger hospitals and their villages or towns. That is why mental hospital-based treatment is considered outdated, unproductive, and rife with human rights violations.

What has to be done to solve this problem is obvious. Large psychiatric hospitals should be closed, according to this WHO assessment. Instead, primary care centers should be used to provide mental health treatment and care. Primary staff must be taught and support must be extended by more specialists for this change to be successful. Early detection of various mental problems, treatment of mental problems, referral to higher levels of care whenever and wherever necessary are all essential services at the primary care level. Aside from that, primary care facilities may readily provide care to mental health needs of patients having some physical problem, as well as promotion of mental health. Thus Primary care for mental health must be supported by other levels of care, which may include community and hospital services to meet the mental health needs of the population.

Treating mental illnesses at primary care facilities allows for early detection, holistic therapy, and, most importantly, treatment closes to the patient's home. Furthermore, primary care is more effective in the prevention of mental illnesses. Promotion of the same will also be achievable at the grassroots level. Nonetheless, primary mental health treatment alone will not be adequate to be totally effective and efficient. Secondary care will always be available, and in challenging instances, it can provide support and supervision following a referral from a primary care physician.

A substantial need for mental health integration at PCCs was advocated in paper "Integrating mental health into primary care: A global viewpoint," published by WHO and "World Organization of Family Doctors" (Wonca) in 2008. Technical understanding of signs & symptoms, as well as a mindset that recognises, embraces, and respects the patient's reality, is the key to a good diagnosis. Useful assessments cannot be established without knowledge of signs & symptoms on one side and awareness of patient's reality beliefs on the other.

Continuously extending the care is crucial component of good primary care, where a patient and a health provider have a long-term connection, the quality of evaluation and diagnosis is likely to improve. In primary care, however, diagnosing mental diseases is as much a function of health personnel' attitudes toward patients as it is of their diagnostic knowledge.

### 1.4 Imparting Mental health training to general practitioners

Zhang et al. (2019) discovered that diagnosing and working on systematic evaluation of mental health illnesses is difficult for general practitioners in underdeveloped nations without obtaining outside aid. Another reason for GPs' diagnoses of mental problems is their lack of qualification. It was proposed that in order to overcome these challenges, policy and program modifications, as well as the right application of effective instruments, be implemented. General practitioners lacked the confidence and abilities to do psychiatric evaluations, and they rarely did so.

"Designing and implementing an innovative digitally driven primary care psychiatric program in India", according to a research article. Manjunatha et al., (2018) emphasized the need of training for primary care physicians. General practitioners' failure to recognize mental disorders in their clinics is related to a lack of or insufficient training, as well as exposure to psychiatric training. The authors' purpose in their research was to provide an overview of five different training modules, including PCPP (Primary Care Psychiatry Program), and their various levels of implementation.

In the near future, developing countries will be unable to provide basic mental health care in primary care settings. NIMHANS Bangalore is a pioneering institute in India, training PCDs all across the country. Two innovative programs, CSP and Tele-OCT, have already been launched, with promising outcomes. There are more modules as well, but they have yet to be examined; the process is still in progress. For PCDs in Uttarakhand, a one-year certified training for primary care physicians is being implemented. The pan-India expansion is being implemented successfully

Patients with somatic complaints that can never be explained medically unexplained, according to Menon et al. (2017), require a significant number of visits before being referred to a psychiatrist for therapy. This just demonstrates the necessity for more doctors, particularly general practitioners, to receive training in order to be able to diagnose and handle unexplained medical complaints.

Verma et al. (2019) did a study to determine presence of depression & GAD among senior Punjabi patients. Conclusion of the 320-person cross-sectional study was that non-communicable diseases (NCDs) with co-morbid mental disorder constitute an increasing public health burden among the country's older population. The NCD program must take urgent steps to extend mental-health care to elderly people with NCDs as part of a comprehensive care package.

Singh (2018) reviewed the district Bellary in Karnataka in his article titled, "District Mental Health Program - Need to look into solutions in the period of Mental Health Care Act, 2017 and moving beyond Bellary Model". According to Bellary model, in addition to their usual work in basic health centers, doctors and workers in primary health centers must receive training in identifying & managing mental health problems. "National Institute of Mental Health and Neurosciences (NIMHANS)" has been educating medical officers for ninty days providing the skills for treating psychiatric problems at primary level. According to the "National Mental Health Survey", treatment gap from 70 to 92 percent was noticed for various mental conditions.

"Mental Healthcare Act 2017" (MHCA) only allowed a general physician to treat an emergency patient suffering from a mental disorder for 72 hours before referring the patient to a higher center, and there is no provision that allows non-mental health professionals to treat the patient even during follow-up. Even in primary care, there are significant limitations to treating substance misuse patients.

A study by Pfaff et al. (2001) looked at how successful a training program for general practitioners may be in recognizing and responding to psychological distress & suicide idea in young people. This research was carried out in general practice surgeries in Australia. A one-day training course for 23 general practitioners was held to improve their ability to recognize and manage. Those young patients who are on the verge of committing suicide. General practitioners' recognition rates of psychologically ill individuals increased after they received training. GPs' patient management practices did not change much as a result of the training. Those young patients on the verge of taking their own lives. Following training, general practitioners' recognition rates of psychologically unwell patients improved. As a result of the training, GPs' patient management methods did not change much.

Naismith et al. (2001) did a study titled, "Effect of mental health training and clinical audit on general practitioners' management of common mental disorder." 190 G.Ps completed this seminar based training, which included 12-hour training program conducted in four seminars, focusing on "improving GPs' capacity to identify and manage patients with depression and anxiety; practice audit with patient- and practice-based feedback on diagnosis and treatment of common mental disorders; and practice audit with patient- and practice-based feedback on diagnosis and treatment of common mental disorders". The study's principal consequence and result is both intriguing and encouraging. Following the training program, general practitioners' knowledge of pharmacological therapies and clinical management improved. 97 percent of general practitioners reported feeling more confident in their management abilities. In the first audit, GPs who had received training had greater diagnosis rates than those who had not received any training, 36 percent against 29 percent, and their diagnosis. Similarly, GPs with the training could deliver more mental health care than those who did not.

### 1.4.1 MENTAL HEALTH TRAINING

The WHO produced "Mental Health Policy and Service Guidance Package in 2003", and one of the most essential parts in the notion of advocacy is education and training for medical workers and professionals. Despite the fact that the health ministry has been given a large sum of money, little is being done in the area of mental health education and training.

Choudhary and Mishra investigated the knowledge and practices of general practitioners in the domain of psychiatric issues in the city of Ludhiana. A total of 158 "non-psychiatrist medical practitioners" were included in the study. This study's findings were quite fascinating and pertinent in this case. The majority of general practitioners (79.7%) are unaware of the diagnostic criteria and have not had any training or experience to address mental health disorders. They use their own intuitions to help individuals with mental health issues. Mental health (psychiatric) issues are very common in primary care physicians' practices, according to 71% of them. Gautam and Kapur (1980) discovered the same thing, noting that 71 percent of GPs practice medicine without much training or understanding.

In a 2008, WHO published a report titled "Integrating mental health into primary care: a global perspective," it was explicitly stated that family physicians' awareness of mental diseases is very low. There is a significant difference between countries, with some countries having as few as 10% of mental problems diagnosed by treating physicians. Patients seek help from a primary care physician for a variety of family, social & emotional difficulties, but they may assume that in order to be helped, patients must make legitimate physical complaints.

According to Miros and Jaworski (2014), it is only logical that if a primary care physician lacks psychology understanding, he may miss the diagnosis and continue to treat the physical symptoms rather than the underlying mental condition. Failure to recognize mental illnesses can have catastrophic ramifications. As a result, many authors emphasize the need of a medical professional's understanding of psychology in addition to their medical subject matter. Mental problems in basic care are poorly investigated, poorly understood, and poorly managed, according to Hans-Ulrich Wittchen, Stephan Mühlig and colleagues (2003) in a paper titled "Mental disorders in primary care." It went on to say that according to an international WHO survey, nearly a third of GP consultations had a direct and explicit psychological component. It could be a case of major depressive disorder, anxiety, or somatoform disorder. According to European GPs, roughly 30% of their patients have clinically relevant mental disorders to a considerable degree. If clinically serious psychological issues are taken into account, the number can rise to as high as 30%. When a standardized diagnostic interview is used, similar high rates are discovered.

Over half of all mental health syndromes are clinically significant, raising the question of which patients require professional therapy at the primary care level. For this reason, the patient's current complaints and subjective suffering should be prioritized while treating or referring the patient to medical care.

Working in the medical field necessitates not only medical expertise but also psychological knowledge. It applies not only to doctors, but also to nurses and widows. It was discovered in a study conducted by Adamus and Jaworskia (2014), which looked into the psychological knowledge of doctors, nurses, and midwives. All medical groups expressed a significant desire for psychological training. The study also recommended that a wide range of psychological themes be included in medical college curricula, since this will help medicos fulfill their professional responsibilities.

According to the WHO (2016) report, "The Health Workforce in India," a shortage of competent health workers was obviously a major impediment to achieving health delivery in a timely manner. To reach China's level of doctor density, we'd need an additional 700,000 doctors, yet our medical schools could only produce 30,000 doctors each year at the time. It has risen since then, but not nearly to the level that would allow the gap to be closed sooner. It also stated that an MBBS degree is not required for all doctors. Many doctors in China have only a three-year medical degree, and paramedical workers could fill many of our needs. As many as 31.4 percent of allopathic doctors had just completed secondary school and 57.3 percent did not have a medical degree. Sixty-seven percent of nurses and midwives had only completed secondary school. When we examine qualifications and education levels of urban and rural doctors, we can see that urban doctors have an advantage over rural doctors. In the case of allopathic doctors, 83.4 percent of urban doctors having completed high school, compared to about 46 percent of rural doctors. Only 58.4 percent of urban allopathic medical practitioners held a medical degree, compared to 18.8 percent of rural allopathic physicians.

Ramanuj & Ferenchick (2019) in the second part of their study on depression in primary care put emphasis on training part of primary care physician. Despite their growing involvement in the treatment of depression, primary care practitioners often have little training in behavioral health, according to the researchers. The lack of early detection, treatment, and follow-up for depression has been well documented. Providers frequently feel unprepared to meet the requirements of these patients, and some professionals believe that training for depression is insufficient. The way mental health treatments are given in primary care obviously necessitates a shift in how physicians are trained and monitored throughout their careers as primary care physicians.

Mash et al. (2015) released an essay based on two workshops held in 2014 in Fortaleza, Brazil, titled "Towards Unity For Health Conference." The authors compared and reflected on primary care doctor duties and training in four countries: India, Brazil, China, and South

Africa. The need for a primary care physician was one of the main issues that arose. Not only does the primary care doctor need to be clinically competent, but he or she may also need to be a change agent, a critical thinker, a capability builder, a collaborator, and, most importantly, a community advocate. At primary care centers, a wide range of practitioners are available to provide services. One of the success stories that added strength to community-based primary care is the training and induction of 9 lakh ASHA workers (Accredited Social Health Activists). In India, an undergraduate degree is expected to create a 'basic doctor' who will work in the public health system. However, the majority of newly qualified doctors chose to work in hospital-based specialties rather than general care. AYUSH (non-allopathic alternative system) physicians have filled a considerable number of vacancies. Although policy envisions a role for postgraduate family medicine, no specified positions within the health system have yet to be created. Although primary health care physicians play an important and desirable role, the quality of this basic health care must be improved. As part of larger primary health care team, general practitioners are critical to assuring quality.

# 1.4.2 Impact of mental health training

In "European Journal of General Practice", AllaZakroyeva et al (2008) published an article titled "Training Russian family physicians in mental health skills". According to the findings, mental health training delivered to family physicians of Russia improved theoretical understanding and self-reported management. This study explains how the training for family physicians in mental health detection and management abilities was set up. This was based on the findings of the 75 doctors who were among the first to attend the course in Ekaterinburg, Russian Federation.

Instructions given were through lectures, group discussion and role-plays. To start with the training material was used from "World Psychiatric Association's (WPA)" training materials specially meant for general medical practitioners on mental health skills, dubbed into Russian. This was their first official training on depression and "unexplained somatic symptoms (USS)". Before the training and three months following the course, all of the doctors were tested on their clinical knowledge and experience. The study discovered that older doctors began course with a poorer knowledge foundation than younger ones, but gained more information over time. Theory part understanding of depression and unexplained physical symptoms grew greatly, and treatment of these individuals changed dramatically.

The impact of "mental health training and clinical audit on general practitioners' management of common mental disorders" was investigated by Naismith et al. (2001). The research was carried out in Australia between 1998 and 1999. A four-seminar, 12-hour training program aimed at increasing general practitioners' ability to recognize and manage patients with depression and anxiety. The study found that after the training program, G.Ps' knowledge of pharmacological therapies and clinical management improved. 97 percent of doctors said they felt more confident in their management abilities. In the initial audit, G.Ps who had received training demonstrated a greater level of diagnostic skills in addressing common mental diseases than those who had not (36 percent versus 29 percent). Even their diagnosis rates improved with time, rising from 36% to 39%, whereas those of GPs who failed to participate in training, remained stable. Same way, general practitioners who had received training were able to offer extra treatment for mental health than those who had not received training. Greater emphasis was given by them on "non-pharmacological therapy" (24 percent vs. 21 percent in the initial audit, and 25 percent vs. 19 percent in the re-audit). Clinical audits are able to increase awareness of mental diseases, but they do not improve mental health practice, according to the study's findings.

Carthy et al. (2013) published their study titled, "Mental health practices and attitudes of family physicians can be changed". It stated that In British Columbia, family physicians & medical office employees were trained for "mental health first aid". Over 1400 of the 3300 family physicians in the province had their training. Physicians reported moderate to high success in adopting "self-management tools" into their practices, as well as a positive influence on their patients. The "mental health module" is affecting the way people practice, according to the study's findings. The curriculum included strategies for modifying behavior, which in turn helped to change stigmatized views toward this patient population.

In a report titled "Bringing together physical and mental health," Naylor, Das and Ross (2016) argued that needs of physical and mental health had treated differently considering these as two different entities. Different organizations and staff groups generally provide services in varied places, with different funding arrangements, different types of performance monitoring management. To date, efforts to promote integration had mainly focused on bridging gaps between primary & secondary care. However, NHS's 5 years strategic plan emphasizes the significance of a third axis for integration. Collaborating physical & mental health together makes strong case for another dimension. It investigated, from user's perspective, what a "whole-person" approach to physical & mental health would be. It

examined 10 areas where the most improvement could be made by looking at existing service innovations. Within current frameworks, health professionals, as per the study, have the capability to integrate physical and mental health care and can make it a reality.

### 1.5 Significance of the study

As research topic is dealing with Mental Disorders and prevalence of these disorders is in every walk of life. So any research done in this field is definitely going to contribute to the society and has potential to bring a paradigm shift the way primary care physicians are treating their mental disorder patients, along with having a great scope of its acceptance, nationally and internationally.

Significance of this study lies in the fact that proposed study will deal with those persons who are having maximum access to the mental disorders patients and minimum access to psychology knowledge—the primary care physicians. Maximum patients and least knowledge, a deadly combination indeed. As a result many psychological diagnoses are missed because the psychological presentations, represented clinically in the form of somatic complaints, are being treated as physical ailments, not as mental disorders. This study has a potential to bring a paradigm shift in the way primary care physicians are treating their patients of the mental disorders. Primary care centers are projected as the next frontiers of the clinical psychology (Lary 2006). This projection is based on the ground that maximum number of patients consults their primary care physicians to seek consultation for their mental health instead of a psychiatric or a psychologist. But it remains the prerogative of the physicians to make the diagnosis correct or incorrect. And very interestingly it has documented that maximum number of primary care physicians or General Practitioners commonly fail to diagnose common psychological problem like anxiety or depression. (Eisenberg, 1992; Higgins, 1994 Cummings, Cummings, & Johnson, 1997)

In a report by "World health organization" in 2008 titled, "Integrating mental health into primary care: a global perspective", it's been clearly reported that recognition of mental disorders by family physicians is low to moderate at best. There is a significant difference between countries, with some countries having as few as 10% of mental problems diagnosed by treating physicians. Patients typically seek help from a primary care physician for a variety of family, social and emotional issues, but they may believe that in order to be assisted, they must complain of what are considered as valid physical complaints.

It is but natural, if primary care physician lacks knowledge in psychology, he can miss the diagnose and will continue to treat the physical symptoms only, not the underlying mental disorder. Failure in detecting mental disorders can lead to grave consequence. And that's why many authors attention was drawn to the fact that considerable knowledge of psychology to a medical professional is also needed apart from medical subject matter. (Adamus and Jaworski 2014)

This proposed research work is all about to study the effect of psychological knowledge provided to the primary care physicians and how this knowledge can improve the diagnostic skills of the physicians in diagnosing anxiety, depression and psycho somatic disorders.

# 1.5.1 Research Gap

After going through a lot of literature review, one can find the studies putting emphasis on the importance of Primary Care centers are projected as the next frontiers of the clinical psychology. Studies done by WHO (2008) and Lary C. James, (2006) are testimony to this statement.

Patients having some mental health problems feel more comfortable with their family physicians. Larry (2006), states that most Americans prefer their family physicians for mental health services than either a psychologist or a psychiatrist. Even the patients having mental disorder with a clinical presentation of physical symptoms, consult their primary physicians, taking it as a physical ailment.

But on the other side, primary care physicians lack knowledge and skill to treat mental disorders. Choudhary and Mishra (2007) states the pathetic plight of the Primary care physicians by adding that majority of non-psychiatrist medical practitioners (79.7%) had little knowledge of diagnostic criteria and no experience or training in dealing with mental illness. Their mental patients are treated based on their own intuitions.

And very interestingly it has documented that maximum number of primary care physicians or General Practitioners commonly fail to diagnose common psychological problem like anxiety or depression. (Eisenberg, 1992; Higgins, 1994, Cummings, & Henderson, 2005).

In a report by WHO in 2008 titled, "Integrating mental health into primary care: a global perspective", it's been clearly reported that recognition of mental disorders by family physicians is low to moderate at best.

With lack of psychological knowledge, Primary care physicians miss the diagnosis. It has already been documented that maximum number of primary care physicians or General Practitioners commonly fail to diagnose common psychological problem like anxiety or depression. (Anjana et al. (2019)

Studies also prove that mental health training is being demanded and has the potential to dramatically improve the knowledge and skill of the physicians. 98 % of the primary care physicians were of the opinion that they need to know more about the psychiatric problems and their management. (Choudhary and Mishra (2007). And that's why many authors draw attention to the fact that considerable knowledge of psychology to a medical professional is also needed apart from medical subject matter. (Mirosł & Jaworski 2014)

In Russia, the first Mental health training to the primary care physician was given by Zakroyeva et al. in year 2008. They concluded their experimental research by saying that after getting mental health skills training, physicians improved their theoretical knowledge & diagnostic skills. Theoretical understanding of depression grew substantially, and the manner these patients were treated changed dramatically. The course was then enlarged, with more Russian teachers participating.

Somatic symptom Disorder is specially introduced in DSM 5, as maximum number of mental disorder patients has physical complaints, but on the other hand, the primary care physicians have no clue that somatic symptoms can be the manifestation of psychological disorders.

Primary care physicians of Ludhiana area of Punjab had agreed that they Mental health training will help them in improving their skills. But no such training has happened in this regard in India. Continue medical Education is there in medical profession but research work relating to these CMEs is not being documented.

A very interesting study was done by Ansseau and Dierick published in journal of affective disorders in year 2004, it was revealed that there is high prevalence of mental disorders in primary care setups. The threshold psychiatric disorders was detected as high as 42.5 % of all patients, and the most interesting and astonishing finding of this study was that only 5.4% patients consulted their family physicians for psychiatric reason. It could be due to the lack of psychological knowledge to the primary care physician.

A huge proportion of mental patients do not obtain sufficient treatment as a result of this large gap, and they suffer from long-term sickness and disability as a result. Many of the patients

who do make it to the psychiatry outpatient clinic do so late, when their illness has already progressed to the point of being chronic & resistant to treatment. Problem of a shortage of psychiatrists is exacerbated by general practitioners' and other medical subspecialists' profound misunderstanding of and lack of necessary abilities in treating patients with mental health disorders.

# 1.5.2 Rationale of the study

Mental health problems are on the rise year after year, and Covid-19 has changed the scenario all together. More and more patients having mental health problems are approaching their family physicians or the general practitioners. But on the other hand, what to talk about the management, general practitioners lack the psychological knowledge even to identify these problems in their day-to-day clinical practice. So in order overcome this issue, an interventional training for the general practitioners is must so that they can be sensitise to psychological issues in their day to day practice. In spite of well documentation of the fact that maximum number of anxiety, depression and somatic symptom disorder patients are being reported to general practitioners, and are being properly handled, not even a single training module is there in India which can address this problem. There are only a few interventional training modules available, but covers very large topics, and the duration of the training is too lengthy and as a result, general practitioners find it inconvenient. More over the validation of those is not documented anywhere.

So there is a need of a new interventional tool which focus only on the psychological issues, must be brief and to the point, and must cater maximum information on the most common psychological issues at general practice level—anxiety, depression and somatic symptom disorder.

### 1.5.3 Research question:

Whether the developed and validated brief psychological intervention will help general practitioners to identify and manage common mental health problems.

### 1.5.4 Statement of the problem:

Development &validation of a brief psychological intervention to manage common mental health problems in general practice.

# CHAPTER 2 Review of literature

# **CHAPTER 2**

### 2.1 Review of literature

- 2.1.1 Concept of BPI
- 2.1.2 Anxiety and Psychological Interventions
- 2.1.3 Depression and Psychological Interventions
- 2.1.4 SSD and Psychological Intervention

# 2.1.1 Concept of BPI

Brief interventions are defined in a variety of ways. They've been dubbed "basic advice," "minimum interventions," "Brief counseling," and "short-term therapy" in recent research. They can be as basic as a professional's suggestion to cut down on drinking (e.g., a social worker, nursing assistant, doctor) or a number of interventions offered as part of a treatment program. Brief interventions can thus be thought of as a collection of rules for interventions that differ from, but do not contradict, the ideas that underpin standard treatment. Brief interventions are methods aiming to analyse the problem & urge individual to take action to address his or her substance addiction, either organically or by client-directed ways, such as seeking treatment for other substance abuse.

Adamus and Jaworski (2014) published a study titled "Psychological knowledge and skills in clinical practice among selected medical professions" and stated that a medical profession (doctor or nursing assistant or midwife) necessitates a substantial understanding of psychological concerns. Faced with a rise in public knowledge and shifts in social views regarding health habits, it is vital to consider a variety of topics relevant to medical professional education. Primary goal of broad professional training for medical staff is to highlight the benefits of modern, sound psychological understanding.

Rose and Parrish (2008) in her publication titled, "Developmental behavioural pediatrics" included a wide variety of psychotherapeutic and behavioural treatments in psychological interventions. These treatments are designed to minimize the psychological distress and maladaptive behaviour, and it also increases the adaptive behaviour. It this is achieved typically through interaction and counseling support. For younger children, such interventions are conducted not only with the children themselves, but also with their parents, their teachers, and all other persons who have significance in their lives.

Ballester and Andreoli (2005) tried to find out the reasons behind the diagnose failure of primary care physicians, and concluded that mental diseases are common in general population, and they constitute a large potential need for basic healthcare treatments. It is estimated that such issues account for 25 to 30 percent of consultations in regular outpatient services. Mental problems, on the other hand, are difficult for general practitioners to diagnose and treat effectively. Furthermore, they are frequently overworked and skeptical of their role in mental health care. The difficulty in diagnosing is said to be attributed not just to a shortage of time for seeing such patients, but also to the fact that good outpatient medical care necessitates certain skills. Physicians are educated to diagnose illnesses based on their classification, yet often struggle to use psychopathological vocabulary when diagnosing mental illnesses. The imprecise biological foundation for mental diseases is a significant barrier in identifying them, despite recent developments in neurosciences making significant contributions. Furthermore, programs that focus solely on the diagnosis and administration of medications may overlook the most important goal of primary care clinical practise: the ability to develop and maintain a relationship with patients who have complex problems in order to facilitate attendance and treatment.

Unfortunately, it has clearly been evident that only a small minority of children, who experienced significant mental health problems, ever receive such treatment. It is because of the fact that such types of psychological treatments have traditionally been administered mainly by trained professionals only. These can be psychiatrists, psychologists, clinical social workers. Because of this lacking psychological services, there is a growing recognition that easy access to psychological care can only be improved if mental health screening, referral, and even service provision are all integrated into the settings where children in need are most likely to be observed, such as primary care physicians.

Some key points from "Manual of Brief psychological intervention in depression" need to be shared here. Brief Psychological Intervention (BPI) requires a specialised expert, broad-based approach that addresses all the factors which are relevant. Medication, whenever become necessary, must be given very selectively along with BPI. Medication treatment at any cost must not be separated from other aspects of BPI. In order to maintain consistency in case management while using multimodal treatment, good connection is required between all professionals involved. Attention need to be given to both the words—internal &external—of young people. Along with it, the broader system like the school, the peers, neighborhood &above all the parents, also need due attention.

In treatment as well as in relapse prevention, psycho-education is the main element in the BPI, and it must widely be given to young persons, their family members, and if possible to other responsible adults. The basic clinical listening skills & empathy are very much crucial, specially when risk is involved. In 2002, a study to see the Effectiveness and cost effectiveness of counselling in primary care was done by Bower P. et al. was published with the finding that for patients in primary care with psychological and psychosocial problems, improves a lot with counselling but this improvement is for short term. This improvement not last for long term in managing psychological symptom levels. The satisfaction with counselling is high for all the patients. Data are lacking if we have to see the cost effectiveness of counselling.

In a randomised clinical trial conducted in 2017 by Chibanda et al., it was revealed that depression & anxiety are common mental disorders across the globe but these disorders are very rarely recognised in "low-income settings", and if recognised then hardly treated. The treatment gap will further be decreased by task-shifting the mental health care to amateur health workers. Study concluded with another finding that the problem-solving therapy intervention at primary care setting will improve the symptoms in 6 month with education & support compared with standard care along with education & support. This cemented the scaling -up of primary care integration of this intervention at primary care.

Patel and Martin(2001) studied "Ageing and mental health in a developing country", in the state of Goa, India, and concluded that there is a need to promote community and professional knowledge regarding late-life mental diseases, as well as improve access to adequate health treatment for the elderly with mental illness. The study recommends ways to build locally suitable support services in the future, such as involving a large network of community health workers. In primary care, depression was a prevalent symptom, but it was rarely identified. Both late-life mental problems have been linked to child maltreatment, neglect, or a lack of love from a parent. There was indication that the family care and assistance system for the elderly was less trustworthy than advertised. The assumption that the child will inherit the parent's property was frequently a condition of care. Those with dependency issues were virtually totally cared for by their families, with little or no professional services.

Gregory (2014) of Stanford University published a research paper on the new science of wise psychological interventions and said that an enormous opportunity is being provided to psychologists in form of wise interventions. Because these interventions allow psychologists to test how a specific social problem responds to specific psychological processes, how we

might alter such procedures in the field, and how a transformation in the psychology field begins to unravel over time in interaction with context, these interventions are becoming increasingly popular. These questions must be addressed since they will aid us in developing distinct psychological theories & answers to social problems. Psychological treatments have extensive impacts, implying that psychological processes are frequently used as major levers in societal problems.

Larry (2006) states that rather than seeing a psychologist or psychiatrist, maximum Americans give preference to consult their primary physicians for mental health issues. The evidence was in favour of providing mental health therapies at PCCs. Directly. Primary care physicians prescribe 67 percent of all psychotropic drugs. Nine out of ten of the most prevalent problems in PCC are not having any organic foundation, and psychosocial issues account for 70 percent of all PCC visits.

Rather than the typical environment, James (2005) described primary care settings as optimum venue for psychologists to give services related to mental health. Development of specific theories about how psychological process contributes to this system allows psychologists for collaborating with general practitioners locally, as well as other social scientists & policymakers. It will assist in scaling up psychological interventions for big populations in order to achieve widespread societal change. Social problems are not only complicated, but also multi-caused, with psychology playing a major role. It is our responsibility as therapists to identify the components of some social problem. It could be global-warming, a conflict, a crime or other psychological issues, and we need to figure out how to deal with them.

Cann & Bowers (2005) studied the impact of "Training in cognitive behavioural interventions on acute psychiatric inpatient wards." Cognitive behavioural techniques found to be the most effective intervention among the other social and psychological interventions for the patients suffering from psychosis. This lays the foundation of providing initiative towards addressing psychological &social interventions available to people having mental illness. This effort is being reflected in government mental health policies. Until now, primary attention has been on the community's inhabitants. On seven separate mental admittance wards in London, UK, this study examines the implementation of psychosocial interventions training not just to qualified psychiatric nurses but also to unskilled employees. The method has the advantage of delivering psychological intervention, follow-up, and clinical supervision on-site. Despite

this, the training has been found to be ineffective in some circumstances. The fundamental cause of this failure was the lack of leadership. The impact of interventional training in these strategies, as well as the implications for mental health education, was explored.

Shergill Narinder Kaur studied the effects of psychosocial therapies on cancer treatment-related psychological distress in her doctoral thesis at the University of Birmingham. This randomised controlled trial only included cancer patients who had at least one psychological or symptom-related outcome. A total of 29 trials with a total of 36 treatments were examined. Relaxation techniques have been shown to have a considerable effect on anxiety in patients receiving therapy for a number of medical conditions. Other psychological and symptom-related outcomes yielded more mixed results. It was difficult to draw any conclusions due to the heterogeneity and ambiguous findings for cognitive-behavioral therapies. The researchers concluded that relaxation training for cancer patients undergoing treatment should be included in clinical practice. To determine the effectiveness of cognitive-behavioral, hypnotherapy, and supportive therapies, more high-quality research is needed.

Pignone et al. (2002) showed that integrating behavioural health treatment in primary care has improved detection of depression and overall health outcomes. Because existing data supports clinical psychology's integration into primary care, several authors have concluded that primary care is clinical psychology's next frontier. Katon et al. (1996) added that presence of psychologists in PCC has been shown to boost patient and their satisfaction. "Behavioral health interventions" in primary care have potential to improve patients outcome while also lowering healthcare cost. Study found this collaborative model as successful one for primary care setups.

# 2.1.2 Anxiety and Brief psychological intervention

According to the findings of a paper published in Lancet Psychiatry 2019 titled, "The burden of mental disorders across the states of India," 1 in every 7 Indians suffers from mental diseases of varied severity. Since 1990, the proportionate contribution to mental diseases of India's total disease burden became nearly double. The "Bill & Melinda Gates Foundation", as well as the "Indian Council of Medical Research, Department of Health Research, Ministry of Health and Family Welfare, Government of India", financed this significant study. From 1990 to 2017, prevalence & disease burden of each mental condition in India's states were documented in this research. The survey also found that 197 million persons in India had mental diseases in 2017, with 457 million having depressive disorders and 449,000 having anxiety disorders.

Bolognesi et al. (2014) did a structured review on Psychological interventions in treatment of generalized anxiety disorder and found that treatments for Generalized Anxiety Disorder include "Cognitive behavioural therapy (CBT), psychodynamic approaches, applied relaxation, internet-computer-based CBT, interpersonal emotional processing therapy, mindfulness techniques, the meta-cognitive model, and well-being therapy." Although CBT is the current "gold standard" for treating GAD, physicians should be informed about alternative therapeutic choices when making treatment selections based on needs of their patients. The best researched psychological treatment for GAD is cognitive behavioural therapy, which is recommended as a first-line treatment. Applied relaxation has been shown to be equally effective as CBT. New GAD techniques and adaptations have been created for providing broader range of treatment options. While results are promising, more research must be done to determine efficacy & relative worth in comparison with traditional CBT.

Peter et al. (2009) of Department of "Psychiatry and Behavioral Sciences, University of Washington School of Medicine", published the study on "Brief intervention for anxiety in primary care patients" and found that the lack of quality care for anxiety may be related to failure to recognise and to diagnose anxiety disorders and low perception for the need of psychological treatment to the patients.

The non-unitary character of anxiety disorders, on the other hand, offers a higher obstacle to successful delivery of "evidence-based psychological care" for anxiety. Instead of dealing with one depressed disease i.e. major depression, primary care physicians are now dealing with variety of anxiety disorders, including "Panic, generalised anxiety, social anxiety, and post-traumatic stress disorder", to mention a few.

This paper provides simple, unified approach for diagnosis, effortless to learn, and pharmacotherapy of 4 most common presentations of anxiety disorders, i.e. 'Panic disorder, generalised & social anxiety disorders, and PTSD" in PCCs, to solve difficulties to recognize & manage different anxiety disorders in PCCs. The creation of this "evidence-based strategy" had aim to improve "evidence-based medication and psychotherapy" at PCCs suffering from anxiety disorder. A validated, simple screening test to identify all mentioned four disorders was well described in the paper. Emphasis was also there for identification of other coexisting psychiatric problems which may complicate treatment. Initial education to patient & discussion on treatment, which was inclusive of basic CBT skills & motivational interviewing, all were well elaborated. Even a validated method to monitor outcome of treatment was also discussed. This diversity of ailments makes it difficult for public health

education campaigns to gain traction: clinicians must memorise four separate diagnostic & treatment techniques, & with other problems they deal with, this variety of "diagnostic algorithms and treatment alternatives" can be overwhelming.

Baldwin & Ruini (2014) did a review on "Psychological interventions in the treatment of generalized anxiety disorder" and concluded that Treatments for GAD include "CBT, applied relaxation, psychodynamic treatments, internet-computer-based CBT, mindfulness techniques, interpersonal emotional processing therapy and well-being therapy". Although CBT is the current "gold standard" for treating GAD, physicians should be informed of alternative therapeutic choices when selecting treatment based on the needs of their patients. The best researched psychological treatment for GAD is cognitive behavioural therapy, which is recommended as a first-line treatment. Applied relaxation has been shown to be equally effective as CBT. Although first results are promising, additional research is needed to prove their worth in comparison with traditional CBT. New techniques & modifications of GAD, such as "well-being therapy", have created to provide broader range of treatment options.

Cape et al. (2010) did a meta-analysis and meta-regression study on "Brief psychological therapies for anxiety and depression in primary care."34 studies, involving 3962 patients, were included. The usefulness of "Brief CBT, Counselling& Problem solving therapy"for routine delivery in PCCs was verified in this review. The helpfulness of brief C.B.T., counseling, and problem solving therapy for usual delivery in PCC was confirmed in this review, but with caveat that effect size is small in comparison to patients receiving these treatment for longer period of time, because there are many patients for whom only brief treatments are insufficient. The exception is quick cognitive behavioural therapy for anxiety disorders, which was found to be equally beneficial as longer therapies.

Seyed and Nejad (2010) conducted a research to study "Impact of life skills training on self esteem, mental health and assertiveness." He said that mental health does not show any significant relationship with assertiveness and self-esteem.

Kurt, Spitzer et al. (2007) conducted a study to know most common mental problems at primary care centers. Anxiety & depression are two most common mental health concerns observed in PCCs, according to them. However, there is significantly less study and screening work done in the realm of anxiety than there is in the field of depression. The truth is that anxiety is far more common than depression, and it has a significantly greater impact on patient functioning, work productivity, and health-care expenses. Anxiety disorders affect more than 30 million Americans, and the expense of anxiety disorders in USA is estimated to

be over \$42 billion dollars each year. It takes into account both direct and indirect expenses. "Generalized anxiety disorder", "Post-traumatic stress disorder", "panic disorder", and "social anxiety disorder" are four most frequent anxiety disorders described in this study. Simple phobias, which are uncommon in clinical practise, are not covered. But only a small proportion of patients (15 to 36%) with anxiety are acknowledged in primary care centers, despite of substantial disability associated with each type of anxiety disorder.

A very interesting study was done by Ansseau and Dierick, published in "Journal of affective disorders" in year 2004, &revealed there is great prevalence of mental disorder in PCC setups. The threshold psychiatric disorders were detected as high as 42.5 % of all patients. And the most interesting and astonishing finding of this study was that only 5.4% patients consulted their family physicians for psychiatric reason. The study's key finding was that mental disorder prevalence rates are more typically encountered in basic care settings, mood, anxiety, somatoform, eating & alcohol disorders being commonest. The significant incidence of "mental health disorders" in general practice was confirmed in this study, as was their frequent relationship with one another.

Hans, Stephan et al. (2003) studied mental disorders in primary care. The study, which took place in primary care facilities across the globe in the 1980s and early 1990s and used reasonably convergent procedures & designs, reconfirmed depression being a common problem in PCCs. With considerable variance, prevalence of depressive disorders had estimated to be around 10 percent of patients visiting PCCs. There is also widespread consensus that more than fifty percent of patients having clinically significant depression go undiagnosed by their primary care physician. Furthermore, only a small percentage of individuals identified appear to be receiving therapies that are considered adequate by experts. Surprisingly, these findings hold true even in the most current studies, despite years of efforts to increase GPs' abilities to detect depressive disorder in patients. Depression has undoubtedly got most attention of all the mental diseases, both by research &investigations in PCCs. ICPE which had analysed data from general population of six countries, has now examined general population having depressive disorder in the previous one year and found only 22 percent each in Canada& USA received any type of treatment, with little more in Netherland & Germany, 32 percent &29 percent respectively, receiving treatment. The importance of PCCs were well demonstrated in the study, with maximum patients treated entirely in basic health care in all nations. Another concerning finding from community research is that it takes many years for the majority of patients to receive effective therapy after the onset of their disease.

Depression 2000, a recent German study, used a three-stage design in 15081 consecutive primary care attendance & 412 GPs. Two-thirds of the 11 percent of patients having "severe mental health problems", were recognised by general practitioners, but only 39 percent were confidently diagnosed as depression, & another 16 percent had probable depression, according to this study. Males (right identification 27 percent) & females (33.2 percent) under the age of 40 had the lowest recognition rates.

Raguram (2002) studied how temples in India help in the mental health. Many people in India who are suffering from emotional discomfort or more serious mental diseases visit Hindu, Muslim, Christian, and other religious institutes, according to him. The healing power associated with these organisations could be found in the location itself, rather than in the religious leader or any drugs available. Ethnographic accounts have dominated studies of these healing places. The psychological state of those seeking care at these religious facilities, as well as the therapeutic consequences of recovery, have not been studied in depth. Rather than acute psychotic illnesses, it has mostly concentrated on possession and non-psychotic disorders. In India, people with significant psychotic diseases attend such healing temples, and knowing the significance of these institutions can aid in the planning of community mental health services in rural areas. The author discussed operations of a Hindu healing temple in South India known for providing assistance to persons suffering from significant mental illnesses. At that location, author also attempted to assess the clinical effectiveness of religious healing.

Prevalence rate mentioned in this study is even higher than the results got in previous trials. The most common disorders which were detected are as follow; Mood disorders were found in 31.0 percent of the population, anxiety disorder in 19 percent & somatoform disorders in 18.0 percent. Findings revealed a high proportion of co-morbidity between these illnesses. The disparity between primary motivations for seeing a family physician and actual diagnoses can be caused by a variety of circumstances at both doctor patient's ends. Study identified many barriers at the general physician level, the most significant of which were a lack of time for interviewing patient, insufficient diagnostic procedure knowledge, frequent somatic presentations of mental disorder, underneath presence of other diseases, & lack of empathy for patients having mental health problem. This disparity was also considered at patient level, and was ascribed to a strong fear of stigmatisation if they sought help for their psychiatric illness.

The conclusion drawn from the above reviewed literature is that anxiety, whose prevalence is very high in general practice, does very beautifully responds to a number of brief psychological interventions. It was observed by reviewing the literature that treatment of generalized anxiety disorder can be done with the help of cognitive behavioural therapy (CBT), psychodynamic approaches, applied relaxation, internet-computer-based CBT, interpersonal emotional processing therapy, mindfulness techniques, the meta-cognitive model, and well-being therapy.

# 2.1.3 Depression and Psychological Interventions

Frost et al. (2019) did a systematic review of qualitative studies to explore how healthcare professionals are managing the old age fellows with depression & their referrals to managing their depression with the help of psychological therapies. Total 27 studies were there in this review study, predominantly with the focus on the views of general practitioners. Many health care professional felt that senile depression was mainly because of the social isolation and decline in function, but treatment for the same was limited. Doctors believe depression is having associated stigma for old agers, which requires time to negotiate. Inadequate time while extending the consultation along with complexity of needs in the fade end of life often leads to prioritisation of physical health over the mental health. Managing "late-life depression" is more of a skill job & interest of individual general practitioners than on some organised or structured approach. The research was concluded establishing the fact that for older adults, mental health problems should be a main matter of concern by providing more psychological services specially designed for elders. This may help in future identification and managing depression.

Kelvin et al. (2010) published a treatment manual named "Brief Psychological Intervention (BPI) for adolescents with moderate or severe depression". Brief Psychosocial Intervention (BPI) mentioned in the treatment of depression includes necessary care, evaluation, case management, formulation, getting engaged with some young fellows along with their respective parents with planning & delivery of the treatment. The important takeaways from this BPI manual are that BPI necessitates a multimodal, broad-based, expert strategy that addresses the pertinent cause factors identified by the evaluation. In addition to BPI, family work and, if necessary, medication should be used sparingly. The therapy of medication should not be separated from the other features of BPI. To preserve case management coherence when using multimodal treatment, strong communication amongst the specialists involved is necessary. The internal and exterior worlds of youths, covering their larger

system: school, classmates, neighbor-hood, and most importantly, parents, should all be considered. Treatment and relapse prevention require the psycho-education to young people, their parents, and other responsible fellows. Listening and empathy are core therapeutic qualities that are critical, especially when risk is involved. Getting risk assessments repeatedly may help in identifying risk but do little to mitigate same. Instead, therapists must concentrate in gaining a better grasp of the risks and taking steps to mitigate them. The depression should be viewed through the lens of the "lived experience" of young people &their families, with young people & their families woven into this understanding. Exercise, sleep, and diet were all extensively recommended in this BPI guideline for depression for physical and mental well hygiene.

Cape et al. (2010) did a meat-analysis study work on Brief psychological therapies for treating depression and anxiety in primary care by including 34 studies and 3962 patients. Out of these studies, 13 studies were conducted on brief cognitive behaviour therapy, 8 of counseling, and 12 of PST i.e. problem solving therapy. The helpfulness of brief C.B.T., counselling, and problem solving therapy for usual delivery in PCC was confirmed in this review, but with caveat that effect size is small in comparison to patients receiving these treatment for longer period of time, because there are many patients for whom only brief treatments are insufficient. The exception is quick cognitive behavioural therapy for anxiety disorders, which was found to be equally beneficial as longer therapies.

Bruce et al. (2015) did a systematic review on "Cognitive behavioural interventions for depression in chronic neurological conditions." The authors say that chronic neurological conditions (CNCs) affect more than ten lakh people in the United Kingdom alone. Patients with CNCs are more likely to experience despair and anxiety. Not only does poor mental health increase the expense of treatment, but it also makes it more difficult to control CNCs. also. CBT is the treatment of choice for depression. However, disease characteristics may limit application of CBT to patients with chronic neurological conditions, such as mobility issues that limit attendance and thus minimizing engagement with behavioral activation, and also difficulties that call into question a veracity of disease-related negativity that may reflect exact appraisals. C.B.T. is effective to treat depression coupled with CNCs, according to all of the trials. The study found that CBT holds potential as a treatment for depression in these circumstances. The treatment regimens as well as the outcome measurements must be tailored to this demographic.

Lane et al. (2005) did an observational study on "Psychological interventions for depression in heart failure." Study says that depression is seen commonly in heart failure patients. Some randomised controlled studies of such interventions treating depression should must be done to see the impact of these types of psychological interventions on depression, cardiac morbidity, behavioural CVD risk factors and quality of life.

Abdulbari, Mohammed, et al. (2013) conducted cross-sectional study, "Diagnostic overlap of depressive, anxiety, stress and somatoform disorders in primary care" and revealed stress having more prevalent followed by somatization & depression. Problems having psychological origin do increase when the age advances and having its peak in 45-55age groups. Male patients considered in high-risk groups, patients having secondary education & an advanced age are also included in this group. There was high rate of somatisation, depression, & anxiety comorbidity. Findings revealed a close link between these psychological problems and the patients. Stress disorders were shown to be more common, as well as a high level of exposure to psycho-social stressors. The study revealed that the prevalence of somatisation and depression were identical, however stress was more prevalent in inpatient patients. The Depression 2000 study found that correct recognition of depression and chances of getting sufficient treatment are linked to similar forecasters on patient's side: old age, known case of depression or history of having depression treatment, depressed temperament &suicidal ideas, as the primary reason for seeking medical help.

The systematic review of the above qualitative studies established the fact that depression must be managed by general practitioners with the help of psychological interventions. The helpfulness of brief C.B.T., counselling, and problem solving therapy for usual delivery in PCC was confirmed in this review for managing mild to moderate depression. However chronic neurological conditions , who are having associated depression, are not going to respond very effectively to brief psychological interventions.

# 2.1.4 Somatic symptom disorder and Brief psychological intervention

Knesebeck et al. (2020), in their paper titled "Causal attributions for somatic symptom disorder" found that Psychotherapy has been shown to be useful in the treatment of SSD. In this survey, nearly 90% of respondents felt that 'job stress' could be a cause of SSD symptoms. In the case of someone who was tired, there was a lot more agreement. 'Lack of willpower' was cited by a quarter of the respondents as one of the likely factors. Another major aspect linked to an increase in desire for and for social distance is a lack of willpower.

In both cases of SSD, work stress was linked to a much higher likelihood of favorably assessing the success of psychotherapy. This research was carried out with two goals in mind. First, what did the general population in Germany think about potential causes of somatic symptom disorder (SSD), and were there any differences in causal attributions based on the symptom and course of SSD? Second, there were causal attributions, which are linked to some treatment ideas and stigmatising attitudes.

Fatema et al. (2019) did a case study in which patients having somatic symptom disorder were managed with "Acceptance and commitment therapy (ACT)". ACT was found to be beneficial in enhancing global functioning, acceptance, mindfulness abilities, and psychological well-being, as well as reducing somatic symptoms, despair, and anxiety. Some patients' despair, anxiety, and somatic symptoms worsened after three months of follow-up. This preliminary research suggests that ACT is practical and could be used as a therapy option. Somatic Symptom Disorder (SSD) is a public health issue because at least 1/3<sup>rd</sup> of the symptoms are medically unexplained. Alternative remedies have been developed since standard medical therapy has had minimal success in treating SSD. In the therapy of SSD, "Cognitive Behaviour Therapy (CBT)" has been demonstrated to be successful. CBT, on the other hand, does not seem to help many patients. Clinicians and researchers have been paying close attention to "Acceptance and Commitment Therapy (ACT)" as a trans diagnostic therapeutic strategy in recent years. The current study looked at the effects of ACT on global functioning, somatic symptoms, anxiety, despair, acceptance, mindfulness abilities, and psychological well-being in individuals with SSD. A single case design research was used, including assessments at baseline, post, and three months later. Five individuals with a DSM-5 diagnosis of SSD received eight weekly ACT sessions.

In an article published in Amarican Family Physician titled "Somatic Symptom Disorder", Stuart et al. (2016) states that "the diagnostic category previously known as somatoform disorders was renamed to somatic symptom and associated disorders in the DSM-5." The main goal of the reform was to better describe these illnesses so that they might be treated in primary care settings. According to the article, somatic symptoms can be caused by heightened awareness of specific physical sensations, as well as a predisposition to misinterpret these experiences as signs of sickness. Somatic symptom condition has an unknown origin. However, several studies have found that there are risk factors for some severe somatic symptoms that are persistent in character. Childhood neglect, any sort of sexual abuse, a hurried lifestyle, &history of substance or alcohol misuse are all examples.

In patients with any suspicion of somatic symptom disorder, screening instrument like "Patient Health Questionnaire-15" should be considered in addition to complete clinical interview & examination for diagnostic measure. In treatment of SSD, "cognitive behaviour therapy" &"mindfulness-based therapy" are both successful. In 2016, Chris Burton, Senior Lecturer at the University of Glasgow's Scottish School of Primary Care Institute of Health and Wellbeing, produced a briefing paper titled "Recognizing and managing patients with medically unexplained physical complaints." The article promotes the idea that patients with persistent or recurring "medically unexplained" physical symptoms are frequent in general practice & place burden on primary & secondary care. While there is significant overlap with common mental disorders (especially anxiety), many "medically unexplained" symptoms can be explained in both biological and psychological ways. This paper summarises current thinking on MUS (Medically Unexplained Symptoms) and offers recommendations for recognising and managing the problem. Many people see their doctor because they are experiencing physical problems. Many symptoms originate without conventional disease, are disproportionate to present pathology, or remain after an original disease or damage has resolved, despite the fact that we think of symptoms as indications of disease. Because all symptoms entail both peripheral sensing and central processing of biological information, they feed into brain systems that assess and respond to the prospect of danger or injury. These peripheral and central processes are disproportionate to each other in some persons (or rather, many people at different periods). Medically Unexplained Symptoms (MUS) is a word that is commonly used to describe physical symptoms that are not sufficiently explained by disease (i.e. organic pathology) or minor illness (such as infection or simple degenerative problems). GPs are concerned about missing disease in MUS patients. In actuality, this happens infrequently: in 5-10% of cases when symptoms have been present for several months and the GP suspects MUS, a causative condition develops over time. Rates are lower in specialist settings, usually around 5%, and many MUS resolve promptly in routine care. MUS are particularly common in patients in regular practice. Approximately one out of every five consultations contains a medically unexplained symptom, and close to 40% of consultants have MUS-like characteristics. With a few patients, administer the PHQ-15 questionnaire. This has a similar format to the PHQ-9, but it's designed to provoke a variety of physical symptoms that aren't usually medically explained. In practice, it might be good to use with patients to emphasise how many symptoms they have despite normal blood tests, for example. PHQ-15 should not be utilised as a screening tool without thought, but it can be helpful in starting the dialogue toward the idea of improved central processing of all symptoms.

Mayou and Farmer (2002) published "Functional somatic symptoms and syndromes: ABC of psychological medicine" in British Medical Journal. The majority of somatic symptoms that patients bring to a medical practitioner, such as general weakness, exhaustion, and bodily pains, remain unexplained despite rigorous tests, according to the study. The patient seeks medical care because of his or her concern about these inexplicable symptoms. To describe this problem, a variety of words have been used, including somatisation, atypical sickness behaviour, somatoform, medically unexplained symptom, & functional symptom. This article stated that knowing the combination of "biological, psychological, interpersonal, and medical elements" in propensity, precipitation, & persistence of functional somatic complaints allow patients to get credible explanations & effective treatment. Effective reassurance given initially, positive explanation, & practical counsel are all important components of general management. Early identification of individuals who are not responding to treatment and who may require extra particular therapies is critical. The inability of health institutions to adequately deal with symptoms that aren't caused by disease shows structural & intellectual flaws in current management. Most prominent of is ongoing impact of mind body differentiation on education &health-care delivery. Longer future, scientific advancements will obliterate this divide. For time being, it places primary management in critical position, ensuring that all patients receive appropriate care.

Henningsen and Thomas (2002) studied "Medically Unexplained Physical Symptoms, Anxiety, and Depression: A Meta-Analytic Review" and concluded that 4 somatic syndromes(IBS "irritable bowel syndrome"; CFS "chronic fatigue syndrome"; FM "fibromyalgia"; SD "Somatization disorder"; NUD "non-ulcer dyspepsia" are linked to depression and anxiety, but not completely dependent on it. For medically unexplained complaints, there is currently only minimal meta-analytic data. The designation of these symptoms & syndromes as "common mental diseases" is not entirely appropriate, given their relative independence from sadness and anxiety. IBS "irritable bowel syndrome"; CFS "chronic fatigue syndrome"; FM "fibromyalgia"; SD "Somatization disorder"; NUD "non-ulcer dyspepsia" and serious depression. The most common clinically presentation in PCCs is medically unexplained pain and body dysfunction. The high prevalence of this presentation is also witnessed in specialist clinics and also found to be responsible for disability of workers. These are distinguishing feature of many somatic syndromes & somatoform illnesses in somatic medicine in psychiatry.

Patients, who have "medically unexplained somatic symptoms" have been found to witness higher rates of depression & anxiety on multiple occasions. This association has not yet been

thoroughly investigated, and there are various probable causes. The link could indicate a reactionary increase in despair and anxiety in persons with chronic physical complaints. Alternatively, somatic and psychological symptoms may be related yet represent common discomfort in distinct ways.

The above literature reviewed revealed that there are four major somatic symptoms which are being presented in general practice. These are IBS "irritable bowel syndrome"; CFS "chronic fatigue syndrome"; FM "fibromyalgia"; SD "Somatization disorder" and NUD "non-ulcer dyspepsia". It was also observed that patients, who have "medically unexplained somatic symptoms" have been found to witness higher rates of depression & anxiety on multiple occasions. Diagnostic overlap of depressive, anxiety, stress and somatoform disorders in primary care" and revealed stress having more prevalent followed by somatization & depression. In the therapy of SSD, "Cognitive Behaviour Therapy (CBT)" has been demonstrated to be successful.

# CHAPTER 3 Methodology

# **CHAPTER-3**

# 3.1 Methodology

# 3.1.1Objectives of study

This present study was aimed to develop and validate brief psychological intervention for general practitioners with the help of which they can easily identify and manage common mental health problems in their day-to-day practice. The present research is having following major objectives to attain.

- 1. To develop and validate 'Brief Psychological Intervention' to manage Common Mental Health Problems in General Practice.
- 2. To investigate the effectiveness of 'Brief Psychological Intervention' in identifying three most common mental health problems—Anxiety, Depression and Somatic Symptom Disorder—at General Practice level.
- 3. To investigate the effectiveness of 'Brief Psychological Intervention' in managing three most common mental health problems—Anxiety, Depression and Somatic Symptom Disorder—at General Practice level.
- 4. To investigate relationship among Anxiety, Depression and Somatic Symptom Disorder among patients visiting general physicians.

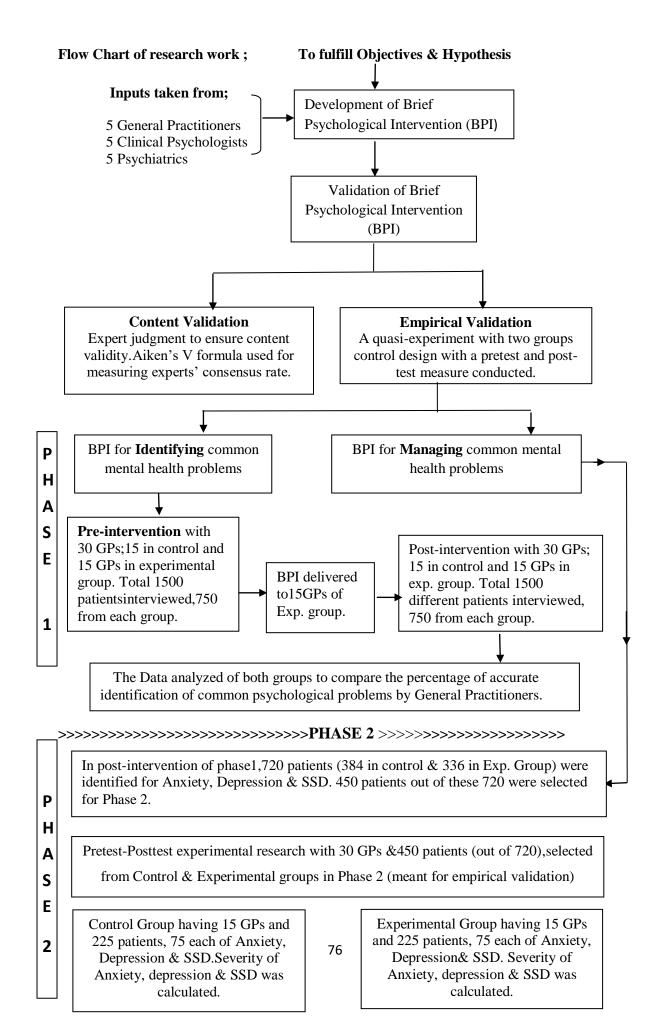
### 3.1.2 HYPOTHESES

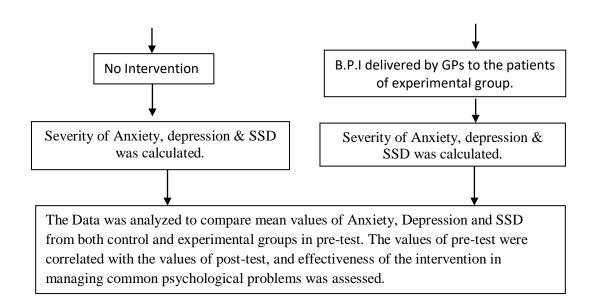
- 1. The Brief Psychological Intervention will show significant difference between experimental & control group in identifying three most common mental health problems—Anxiety, Depression and Somatic Symptom Disorder at general practice level.
- 2.1 There exist no significant difference between experimental & control group before intervention with regard to anxiety, depression & somatic symptom disorder among patients at general practice level.
- 2.2 There exists a significant difference between pre & post experimental group after intervention with regard to Anxiety, Depression & Somatic Symptom Disorder among patients at general practice level.

- 2.3 There exist a significant difference between experimental & control group after intervention with regard to Anxiety, Depression & Somatic Symptom Disorder among patients at general practice level.
- 3. There exists significant relationship among Anxiety, Depression & Somatic Symptom Disorder in patients visiting general physicians.

# 3.1.3 Research design

A "Brief Psychological Intervention to Manage Common Mental Health Problems in General Practice" was developed with inputs from general practitioners, Clinical Psychologists and Psychiatrists. As per feedback from the expert group, the intervention was modified accordingly for future use. This study made use of two validation phases. Formative evaluation, which was employed as major evaluation for content validity, done through expert judgment, & empirical validation was done through a quasi experiment. A quasi-experiment with two groups control design with pre-test &post-test measure was conducted for the validation purpose. Thirty general practitioners, fifteen experimental group subjects and fifteen control group subjects were involved in this study. Pretest-Post test quasi-experimental research was conducted on 30 General Practitioners. Brief Psychological Intervention was administrated by the subject expert to the experiments group. The data was analysed statistically to draw conclusions. The development of this intervention was done by a multidisciplinary group of general practitioners, clinical psychologists and psychiatrists.





# 3.1.4 Development & Validation of Brief Psychological intervention

# Phase 1: Development of intervention program

# Proposal of a psychological intervention

Proposal to develop a training manual for the general practitioners helping them to identify and manage common mental health problems, was shared with general practitioners, clinical psychologists and psychiatrists. The general practitioners and the subject experts shared their experience of brief psychological intervention and considered the proposed intervention acceptable.

# **Identifying theoretical evidence**

To identify intervention targets in light of common psychological problems at general practice level, a systematic review was conducted. After getting evidence from this literature & inputs from the physician, clinical psychologists and psychiatrists, a brief psychological intervention was developed which would help the general practitioners to identify and manage the common health problem—anxiety, depression and somatic symptom disorder—at primary care level.

# **Drafting intervention manuals**

After having valuable inputs from the subject experts and general practitioners, the outline of each session was drafted. The first draft of BPI (Version I) was prepared divided into two

parts. The provisional program was of three sessions of two-hour each with 2 week intervals in between sessions.

Drafted manual was distributed to all the 15 concerned persons i.e. five general practitioners, five clinical psychologists and five psychiatrists, for giving opinions on content &format of BPI. Individual consultancy with General practitioners (service users) was undertaken on interventional manual's format, content and user friendly language. Inputs from Clinical Psychologists and Psychiatrics on improvement of Version 1.0 were taken. Following the feedback, the intervention program was extended to six treatment sessions along with its further modification to more user-friendly version.

# Following flow chart presents an overview of development of brief psychological intervention:

Phase 1 (December 2018 to August 2019)

Inputs from 5 General Inputs from 5 Inputs from 5 Physicians Clinical Psychiatrists. Proposal for a brief Psychological intervention for common psychological problems at General practice. First draft of brief Psychological intervention module (Version 1.0) Individual consultancy with Inputs from Clinical Inputs from General practitioners (service Psychologists on Psychiatrics on users) on interventional manual's improvement of improvement of format, content and user friendly Version 1.0 Version 1.0 language.

78

Final draft of brief Psychological intervention module (Version 2.0)

# Phase 2 Validation of Brief Psychological Intervention Tool

# **VALIDATION**

# 1 Content Validation:

The base of development for BPI was systematic literature review. Expert judgment was obtained to ensure content validity. Aiken's V formula was used for measuring experts' consensus rate.

# 2 Empirical Validity:

A quasi-experiment with two groups control design with a pretest and post-test measure conducted to evaluate empirical validity. 30 general practitioners, 15 in experimental group and 15 in control group were involved in this study.

# **VALIDATION**

# 1 Content Validation:

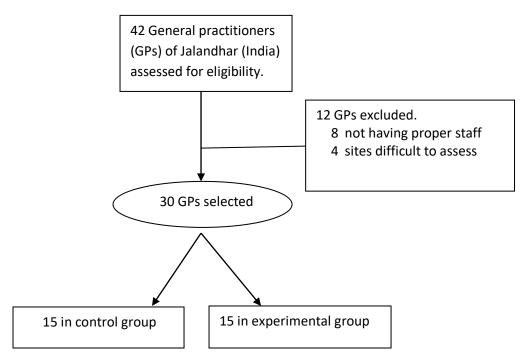
The evaluation of content validity was performed with the expert judgment of four different psychiatrists. The major criteria for the selection of experts were their clinical practice experience of at least five year. Their expertise was necessarily and relevantly required as they can provide very useful inputs for content validation. Four psychiatrists were chosen for the job. All were active practitioners who are not currently or have ever engaged with this researcher on a similar study programme, removing any potential for bias in module content validity evaluation. Three of the four consented to take part in the study, but one declined due to her busy schedule, thus another expert was picked.

Experts were given the programme, asking them to rate it on a 4-point Likert scale (1 stands for absolutely unsuitable, 2 for less suitable, 3 for quite suitable and 4 stands for suitable). To calculate the experts' consensus rate, Aiken's V formula was used to analyse the data. Higher the score, greater the degree of agreement among the experts.

# **Empirical validity**

The experiment group went through the training programme, placing the control group on waiting. Pre & post-training measurements were taken.

Total general practitioners involved in this study were 30 senior medical practitioners. Fifteen general practitioners in experiment while 15 were in control group.

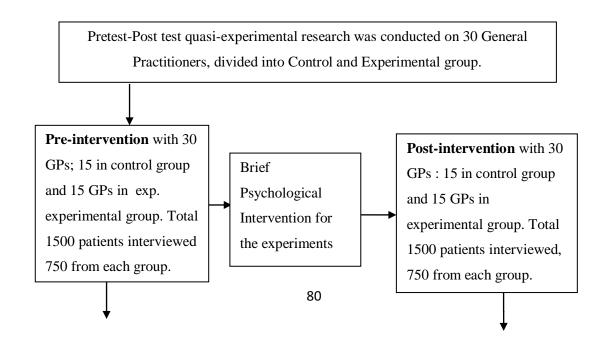


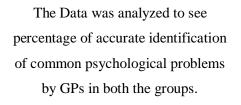
Methodology to investigate the effectiveness of 'Brief Psychological Intervention' is divided into two sub groups; (Empirical Validation)

- 1. In identifying three common mental health problems.
- 2. In managing three common mental health problems.

# **PHASE 1:**

1. Methodology to investigate the effectiveness of 'Brief Psychological Intervention' in IDENTIFYING three common mental health problems is being shown briefly in the following flow chart.



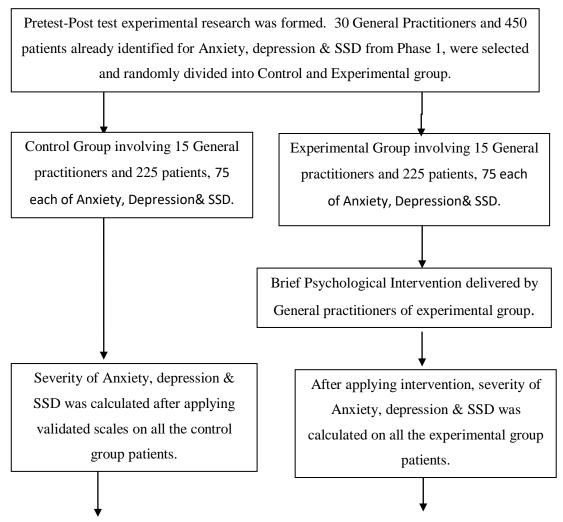


The Data will be analyzed to see percentage of accurate identification of common psychological problems by GPs in both the groups.

The Data from control and experimental groups analyzed to compare the percentage of accurate identification of common psychological problems by General practitioners.

# **PHASE 2:**

2. Methodology to investigate the effectiveness of 'Brief Psychological Intervention' in MANAGING three common mental health problems is being shown briefly in the following flow chart.



The mean of all the three different independent variables—Anxiety,
Depression and Somatic symptom disorder—were calculated.

The mean of all the three different independent variables— Anxiety, Depression and Somatic symptom disorder—were calculated.

The Data was analyzed to compare mean values of Anxiety, Depression and Somatic symptom disorder from both control and experimental groups in pretest. The values of pre-test were correlated with the values of post-test, and effectiveness of the intervention in managing common psychological problems was assessed.

# 3.1.5 INCLUSIVE CRITERIA

**For Primary Care Physician**; The institutional qualified general practitioners, having their own setup, have completed at least ten years of clinical practice, and having an average OPD of at least 20 patients on daily basis.

**For Patients:** The patients must be of at least 18 years or older, physically fit to complete the interview were selected for this study.

# 3.1.6 EXCLUSIVE CRITERIA

# For Primary Care Physician:

The physicians who had not given their consent to actively participate in the Training Module, were excluded from this study.

**For Patients:** Mentally retard, traumatic patients, vital emergencies, home medical consultation, phone consultation, dementia, intellectual deficiency and acute psychiatric disease preventing the patient from answering the questionnaire appropriately were excluded. Those patients who were reluctant to disclose their personal information and medical history were excluded from this study.

# **3.1.7 SAMPLE**

Data was collected from 30 General Practitioners practicing at Jalandhar city (Punjab, India). 15 GPs were in control group and 15 were in experimental group. A survey on 3000 patients, 1500 each in Pre and Post test design, was conducted for the first phase. For second phase, 450 patients, 225 each in Pre and Post test design, was surveyed. Purposive sampling method was used to get data.

**First Phase**: During pre-interventional phase of this study, total 1500 patients were interviewed 750 from control group and 750 from experimental group, i.e. 50 patients from all the 30 general practitioners were involved in this study. In post-intervention phase, total 1500 patients were interviewed 750 from control group and 750 from experimental group, i.e. 50 patients from all the 30 general practitioners were involved in post interventional phase this study.

**Second Phase:** In post-intervention of phase, 720 patients (384 in control & 336 in Exp. Group) were identified for Anxiety, Depression & SSD. 450 patients (225 patients in control group and 225 in experimental group) out of these 720 were selected for Phase 2<sup>nd</sup>. 225 patients from control group (15 patients, five each of Anxiety, Depression and SSD, from 15 control group general practitioners) and 225 patients from experimental group (15 patients, five each of Anxiety, Depression and SSD, from 15 experimental group general practitioners) were involved. Pretest-Posttest experimental research with these 30 GPs & 450 patients selected from Control & Experimental groups were involved during Phase 2 of this study (meant for empirical validation). Just to have a homogeneous sampling of anxiety, depression and SSD patients from the 30 different GPs, 15 patients (5 patients of each of anxiety, depression and SSD) from each general practitioner were involved. It means 225 patients (5 anxiety+5depression+5SSD from 15 control group GPs) and 225 patients (5 anxiety+5depression+5 SSD from 15 experimental group GPs) i.e total 450 patients were involved during the second phase of this study. Pre-interventional Anxiety, Depression and Somatic symptom disorder scores were taken, and then intervention was given to the patients having symptoms for one month. Post interventional scores of each variable was again taken .

# 3.1.8 Variables

# 3.1.8.1 Independent variables

These are referred to as stimulus variables or input variables. They influence a person's conduct by operating either within him or within his environment. These are the elements that

the researcher measures and chooses to explore their relationship to a known occurrence. The researcher's Brief Psychological Intervention served as the independent variable in this study.

# 3.1.8.2 Dependent Variables

These variables are also referred to as response or output variables. These are the components that are measured and observed in order to determine the independent variable's impact. Anxiety, depression, and somatic symptom disorder were the three dependent variables.

- **3.3 TOOLS;** The following tools were used to collect data.
  - 3.3.1 "The 12-item General Health Questionnaire (GHQ-12 scale)
  - 3.3.2 The Generalized Anxiety Disorder Scale-7 (GAD-7 scale)
  - 3.3.3 The patient health questionnaire-9 (PHQ-9 Scale)
  - 3.3.4 The Patient Health Questionnaire-15 (PHQ-15 Scale)"

All the above mentioned tools are validated in a number of studies conducted across India.

# 3.3.1 The 12-item General Health Questionnaire (GHQ-12 scale)

GHQ-12 scale, is developed by Goldberg and Paul Williams, was the first instrument used in this study. "GHQ -12" is shortest version of "GHQ" developed by Goldberg & Paul and is mainly concerned with the psychological well being of an individual.

"General Health Questionnaire (GHQ)" is a tool for assessing present mental health and widely utilised in variety of situations and cultures since its creation by Goldberg in the 1970s. The questionnaire was originally designed as a "60-item instrument", but there are now a number of shorter variants available, including the "GHQ-20"&"GHQ-12". The scale asks if responder has lately encountered a specific symptom or behavior. Each item is scored on a four-point likert scale (often, sometimes, seldom, and never), and "GHQ-12", for example, yields a total score of 36 or 12 depending on the scoring techniques used. GHQ -12

The scale reliability ( $\rho$  = .85) for males and females (both  $\rho$ s = .85). Cronbach's  $\alpha$  coefficient of the GHQ-12 was 0.892, the Cronbach's  $\alpha$  coefficient was 0.877–0.888. the split-half reliability was 0.843.

# **Instructions given:**

The subjects were provided required instructions and a sufficient rapport was built before the scale was administered. Respondents on the GHQ-12 scale make 12 statements about themselves. On a likert scale, respondents indicate which choice each sentence relates to them.

"SCORING GHQ-12

Positive items	0(always)	3(never)
Negative items	3(always)	0(never)

Threshold score is 4 or more

# 3.3.2 The Generalized Anxiety Disorder Scale-7 (GAD-7 scale)"

"Generalized Anxiety Scale (GAD-7)", developed by Spitzer, will be used to assess anxiety among the patients. The response options in this scale ranges from 0 to 21, with four different responses—"not at all", "several days", "more than half the days", "nearly every day" by assigning scores 0,1,2,3 respectively.

Spitzer developed the "Generalized Anxiety Disorder Scale-7 (GAD-7)" as a screening tool and severity indicator for GAD. It is a 7-item, self-rated scale. It's simple to score and was designed to raise awareness of GAD in primary care settings. The scale consists of seven items that assess the severity of various GAD symptoms using reported response categories and points. 1) anxiousness; 2) inability to quit worrying; 3) excessive worry; 4) restlessness; 5) difficulty relaxing; 6) easy irritation; and 7) fear of something bad happening are among the GAD-7 items. The overall score, which is calculated by summing the scores for each of the seven items on the scale, indicates the level of assessment.

Reliability of GAD-7 was high with Cronbach's alpha of 0.876. Convergent validity. The convergent validity of the GAD-7 was demonstrated by its correlations with three scales: HADS-A (r = 0.782, p < .001), HADS-D (r = 0.524, p < .001), and PSWQ (r = 0.605, p < .001).

The GAD-7 is a seven-item self-report scale designed to evaluate GAD's characteristic symptoms. Items are scored on a four-point Likert scale (0 = never to 3 = almost every day). GAD symptoms are graded on a scale of 0 to 21, with higher scores indicating more severe symptoms.

# **Scoring:**

GAD 7 Score	Level of Anxiety
0-4	Minimal
5-9	Mild
10-14	Moderate
15-21	Severe

# 3.3.3 The patient health questionnaire-9 (PHQ-9 Scale)

Kroenke and Spitzer developed the PHQ-9 items scale in 1999, and it is now used to diagnose depression in patients. The PHQ-9 is a nine-question questionnaire used to assess patients for the presence and severity of depression in primary care settings. It's the Patient Health Questionnaire's 9-question depression measure (PHQ). The PHQ-9 takes less than 3 minutes to complete & can be used to make a depression diagnosis according to DSM-V criteria. The sum of all nine PHQ-9 responses is used to predict the presence & severity of depression. PHQ-9 is routinely used by primary care professionals to screen patients for depression. Cronbach's  $\alpha$  coefficient of PHQ-9 was 0.857 and the test-retest reliability was 0.947. The correlation coefficient of the nine items with the total score of the scale was 0.588 - 0.784. Kappa value was 91, 97% and 0.884.

The PHQ-9 can be completed in writing by the patient or the survey items can be asked by clinic staff. The PHQ-9 questions are based on depression diagnostic criteria and inquire about the patient's experience during the previous two weeks. The questionnaire includes questions about motivation, feeling down, sleep difficulties, alter level of energy, eating habits, self-perception, capacity to focus& suicidal thoughts. The responses range from "not at all" to "three" (nearly every day).

# **Scoring:**

PHQ-9 Score	Level of Depression
0-4	No Depression
5-9	Mild
10-14	Moderate
15-19	Moderately severe
20-27	Severe

# 3.3.4 The Patient Health Questionnaire-15 (PHQ-15 Scale)

"Patient Health Questionnaire (PHQ)", a self-administered variant of "Primary Care Evaluation of Mental Disorders", was created and validated in the mid-1990s (PRIME-MD). Robert Spitzer, Janet Williams, and Kurt Kroenke of Columbia University created the PHQ. "PHQ-15 (Patient Health Questionnaire Somatic Symptom Severity Scale)" is a short, self-administered questionnaire developed from the full PHQ that is increasingly used to assess somatic symptom severity and screen for the existence of somatoform disorders in adults (Kroenke et al., 2002). The 15-item scale asks if somatic symptoms such as stomach discomfort or dizziness have occurred in the previous four weeks. Cronbach  $\alpha$  0.87 (p < 0.001) test-retest reliability 0.65 (p < 0.001).

Somatic symptom disorder will be measured using the somatic symptom module of the PHQ (PHQ-15). Subjects were asked for the last 4 weeks to rate the severity of 15 symptoms as 0 ("not at all or not bothered at all"), 1 ("bothered a little"), or 2 ("bothered a lot"). For scoring, response options for these two symptoms are coded as 0 ("not at all"), 1 ("several days"), or 2 ("more than half the days" or "nearly every day"). Thus, the overall PHQ-15 score ranges from 0 to 30, with scores of 5 or more than 5, 10 or more than 10, and 15 or more than 15 indicating mild, moderate, and severe somatization, respectively. In clinical and occupational health care settings, the PHQ-15 has a high level of reliability and validity. There are 15 questions with three answers: not at all, a little, and a lot.

# **Scoring:**

PHQ-15 Score	Level of SSD
0-4	No somatic symptom disorder
5-9	Mild
10-14	Moderate
15 or higher	Severe

**Brief Psychological Intervention Tool;** This intervention tool will be developed and validated by the researcher.

# 3.3.5 Implications

The impact of psychological intervention has been demonstrated in some previous studies, mostly conducted in foreign nations. But in the Indian setting, the author has not witnessed any study where diagnostic and management skills to deal with common mental health problems have ever studied. The author has identified one training module developed by ministry of health, government of India, but this training module was only meant for those general practitioners serving in government primary care centers. The current research study, which was initiated to improve identification and management skills of common mental health problems, will definitely help all the private general practitioners. The findings of this study have clearly indicated that the BPI developed by the author has a potential to improve the diagnostic skills of GPs. Mental health of the nation can be improved if the proper training of this module to given to all the general practitioners of the nation.

Apart from general practitioners, psychologists and paramedical staff working in primary care centers can also be trained to identify and manage common mental health problems which are at mild to moderate level.

# 3.3.6 Limitations

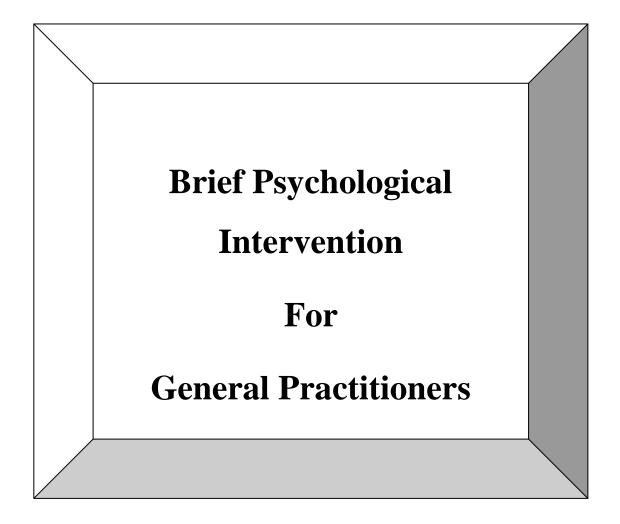
The sample of this study could have been bigger than the present one. In this study only thirty general practitioners were roped in. If the sample size had been around fifty or sixty, the results of the study would have been more specific.

# 3.3.7 Recommendations

The current research study, with an objective to improve identification and management skills of common mental health problems, will definitely help all the private general practitioners. The findings of this study have clearly indicated that the BPI developed by the author has a potential to improve the diagnostic skills of GPs. Mental health of the nation can be improved if a proper training of this module to given to all the general practitioners of the nation.

Apart from general practitioners, psychologists and paramedical staff working in primary care centers can also be trained to identify and manage common mental health problems which are at mild to moderate level.

Prevalence of large overlapping of anxiety, depression and SSD of this & other similar studies, could be a future consideration for a single diagnostic classification. All of these three if present in one patient, can be the diagnostic criteria for a single disorder in the proposed single diagnostic classification.



Developed By: Harvinder Pal Singh

# PART 1

# **PREFACE**

Psychological problems have various negative effects on an individual, these effects can be short and long-term. Apart from the all sort of direct sufferings caused by the signs of a psychological illness, there are many indirect effects, e.g., the indirect expenses of an illness produced by a person's diminished capability might be substantially more than the direct costs of treatment such as blood tests, drug purchases, and so on.

To minimise the burden of psychological issues, timely preventative approaches and some interventional strategies are critical. However, there is a significant disparity between the availability of mental health services and the number of people who use them globally. Though this is true for most countries around the world, the situation in "Low and Middle Income Countries (LAMIC)" is pathetic. The paucity of mental health specialists is one of the major reasons for this large difference. There are extremely few qualified mental health experts in India, and the most of them live in cities.

Under the "National Mental Health Program", the Government of India has already taken steps in this direction, launching the "District Mental Health Program (DMHP)", which mandates the establishment of a mental health centre in each district. However, due to a scarcity of qualified mental health practitioners, this programme will confront challenges. Clinical psychologists are one such profession with a small number of practitioners. As a result, it was decided to train Psychologists who would provide basic psychological services under the DMHP rather than replacing Clinical Psychologists.

However psychologists will only tender their services if they will get the patients, because fact of the matter is maximum number of patients having psychological problems visits their general practitioners in India. But these general practitioners are not trained to identify the psychological patients, and if they somehow identify the problem, they are ill-equipped to offer any intervention by their own. With this in mind, this intervention is developed for general practitioners, who will be provided step-by-step training to identify and manage some common psychological problems.

Different topics have been covered under this interventional module. Brief Psychological Intervention & its Need in General Practice, will give overview of Brief Psychological Intervention, will explain why Brief Interventions in Primary Care, the Demand for Brief Interventions, relationship between Physical and Mental illness will also be explored and above all difference between Psychological Interventions and Therapies will be discussed in first chapter.

The three common Psychological Problems—Anxiety, depression & SSD—at general practice have been elaborated explained. This topic is regarding importance of General practitioner in primary care, need for the mental health training for GPs, and different mental health disorders. Apart from this the second chapter will also cover the recognition part of mental health problems, different factors affecting mental health along with throwing some light on Psychological Assessment of the patient having mental health problem.

The psychological interventions chapter is broken into three parts. The first part covers the basics counseling skills, while second covers some components of psychological interventions that GPs can utilise when dealing with patients and their families. Third section elaborately explained four different interventions that can be used in various situations. It also introduces the trainees to the fundamentals of "community rehabilitation"&a few strategies that GPs can take to help a patient with mental illness recovery.

Next to it is a set of brief psychological interventions (BPI) which can be used by the general practitioners after getting a proper training from an expert person. As per the guidelines of different psychiatrists, clinical psychologists and general practitioners, five interventions are being discussed in this chapter which can easily be administered by a general practitioner in his day-to-day clinical practice while managing patients suffering from mental health problems. These five interventions are; Positive Psychological Activity, Applied Relaxation, Motivational Interviewing, Very Brief CBT and Generic Counselling. The manual is presented in easy English, and the trainer should make certain that trainees fully comprehend principles as well as their duties & obligations. The manual must be utilized for discussions, role play, and other activities.

Training for General practitioners is considered essential because of lack of knowledge and skills about mental disorders and their management. Building capacity in general practitioners, and other specialists performing general duties in various public health facilities are the core resources in the government and private sector to provide basic mental health in community. For majority of people who require mental health treatment in primary care

settings, basic or fundamental mental health care can be provided in the community. This treatment has been shown to be effective, cost-efficient, and lowers the treatment gap for people with mental illnesses. Therefore, capacity building in doctors is an urgent need and there is strong justification to do so in view of limited knowledge and skills about mental disorders. The trained doctor is expected to provide mental health care in an integrated manner within the context of primary care in the community. Those who need higher level of care should be referred to tertiary care institutions.

The training program is so designed that the doctors learn about diagnosis and management, so that essential and basic mental health is provided to those who seek help in PCCs. It is estimated that one in four patients using primary health care services have one or the other mental health problems and most often these disorders are under diagnosed and those diagnosed are inappropriately treated. This result is chronic development of the mental health condition, dissatisfaction with care and often patients incur huge cost since they seek help to redeem their distress. The program is designed to sensitize the doctors about mental health problems and its consequences on the individual, his family and the community, impart basic clinical skills required to diagnose and manage such disorders in their own settings. Brain storming sessions, group discussion, didactic lectures and case demonstration using a wide range of videos typical of person with mental health problems in the community will be used during training sessions, uses.

# Brief Psychological Intervention—an overview

There are a number of definitions of brief interventions (BI). In latest literature, these are being referred as "simple advice," "minimal interventions," "brief counselling," or "short-term counselling." BI may be simplest form of advises given by an untrained professional, like physician, physician assistant or even a social worker.

Brief interventions are viewed as, "A set of principles regarding interventions which are different from, but not in conflict with the principles underlying conventional treatment. Brief interventions for alcohol problems, for example, have employed various approaches to change drinking behaviors. These approaches have ranged from relatively unstructured counseling and feedback to more formal structured therapy and have relied heavily on concepts and techniques from the behavioral self-control training (BSCT) literature."

BI are described as, "a useful component of a full spectrum of treatment options; they are particularly valuable when more extensive treatments are unavailable or a client is resistant to such treatment. Studies of brief interventions have been conducted in a wide range of health care settings, from hospitals and primary health care locations. In general, brief interventions are conducted in a variety of opportunistic target different goals; may be delivered by treatment staff or other professionals, and do not require extensive training."

BI generally conduced through different ways, and most typical ones are one-to-one sessions held with help of some written material (like self-help manuals) or even without any written material.

# Reasons behind Brief Interventions at Primary Care (PC):

- > PC is focus of treatment.
- > Evidential support is there for brief interventions in Primary Care.
- > Simple to implement with a variety of Primary Care staff members.
- > Stigma is no ware involved.
- > Intervention possible at "teachable moments"
- > Guidance given by primary care staff members is more respected.

# **Rising Demand of Brief Interventions:**

- ➤ The thrust for shorter version of interventions in treating psychological problems originates from many sources. A number of developments happened in the recent past which strongly advocated the idea of establishing such type of intervention which must be community based, must be served in continue form amd also must address the problems of those clinics which are having a large chunk of patients having some psychological problems.
- ➤ A number of evidence studies are there which strongly demonstrated the efficacy of the interventions. And this body, supporting interventions, is growing continuously.
- ➤ There is also strong demand of such type of treatment which is cost effective and effective. In the present era of economic recession, BPI is there to serve the purpose in government and private sector.
- Moreover the clinicians themselves are very much interested short term treatments

# Difference between Brief Interventions and Therapies

There are a lot of things which clearly differentiate a brief intervention from brief therapy. Although both are intended to serve the patient in a better way but even then both are different from each other as per different outcome goals. The major aim of any intervention is to motivate a patient to start some particular action like to get the treatment started, changing the behavior as well as the perception of the patients. Whereas, therapies are being utilized address to large concerns like to change a personality, to maintain self-discipline, or to solve chronic problems that influence to indulge in substance abuse. On the other hand, the implementation for brief therapies is to bring the changes in attitude and behavior of patients. Apart from this there are other differences between the two, which are being discussed below.

**Duration of sessions:** The length of psychological intervention can vary from as less as 5 minutes to maximum more than six 1-hour therapy sessions, but on the other side, the session of psychological therapies is always longer, divided into multiple sessions.

**Extensiveness of assessment:** A greater extensiveness is being adopted while performing therapies as compared to interventions.

**Setting**; No special setting is required for the interventions, even can be delivered at place of primary care clinic. Whereas therapies are provided in a specialised areas like a cabin or so.

**Person delivering the treatment :**Brief interventions is generally given by a much wider group of professionals, but therapies need training in precise therapeutic modalities and can only be delivered by a trained Psychotherapists

**Resources and media used:** To deliver any intervention, some resource material like booklet or computer can be used, but therapies, in addition to it, requires certain structured and manualised protocols.

# 1. RATIONALE OF BPI TRAINING

After going through a lot of literature review, one can find the studies putting emphasis on the importance of Primary Care centres, which are projected as the next frontiers of the clinical psychology. But on the other side, studies have also proved that primary care physicians lack the confidence and skill to manage the common psychological problems. This lays the foundation of this training.

Patients having some mental health problems feel more comfortable with their family physicians. But on the other side, primary care physicians lack knowledge and skill to treat mental disorders. With lack of psychological knowledge, Primary care physicians miss the diagnosis. Studies also prove that mental health training is being demanded and has the potential to dramatically improve the knowledge and skill of the physicians.

As the gap is so wide, there are many instances where patients suffering from psychological problems are not getting proper treatment and thus ultimately end up with more illnesses and disabilities.

And the agony is that when the patient ultimately step in the psychiatry clinic, the problem becomes so chronic it sometimes fails to respond the treatment and therapies. Another big problem is the very thin number of psychiatrists availability particularly in rural areas. Ignorance on the part of general practitioners to identify and mange such problem is also very important point which cannot be ignored.

# Common Psychological Problems and their Identification Skills

# Learning Objectives;

After completing chapter 2, general practitioners will come to know what are the most common psychological problems at GP level are, the importance of Primary Care, need for the Mental Health Training & how to recognising mental health problems. General practitioners will also have an overlook of different factors which affects mental health and psychological assessment in mental health.

# Common Psychological Problems and General Practitioners;

General practitioners are projected as the next frontiers of the clinical psychology. This projection is based on the ground that maximum number of patients consults their primary care physicians to seek consultation for their mental health instead of a psychiatric or a psychologist. But it remains the prerogative of the general practitioner to make the diagnosis correct or incorrect. And very interestingly it has documented that maximum number of General Practitioners commonly fail to diagnose common psychological problem like anxiety or depression.

In a qualitative study published in 2019, titled, "What Impedes General Practitioners' Identification of Mental Disorders" the authors Hanzhi Zhang et al. say that role of general practitioners is very important to identify and manage mental disorders in their OPDs. But as

the GPs are lacking in their skills and also in confidence for doing any psychiatric evaluation and thus they hardly do it. This study finds two main reasons for this lacking on the part of GPs to identify the patients. Firstly the difficulty to make a diagnosis is due to lack of confidence and diagnostic ability, and secondly, the GPs lacked skills for evaluation.

Miroslawa and Mariusz in year 2014 studied to analyse how much knowledge the person of medical professions, such as doctors & nurses, have in the field of clinical psychology. This study was conducted in some selected persons working in the field of medicine. They very beautifully concluded that performing a medical profession need knowledge of both the spheres—medical and psychology. It will help a lot in their clinical practice.

In its report titled "Integrating mental health into primary care—A global perspective", WHO strongly recommend importance of primary care. It firmly believes that regeneration of primary care is very important in present scenario. Many poor and developing countries are lacking in basic infrastructure in primary care with which mental health care can be taken care of. Bigger cities of these countries may have some bigger hospital offering psychiatry-consultations, but treatment cost is too high to afford for the patients who hardly makes their both ends meet. Distance of these bigger hospitals from their villages or town is another constrain. That's why getting psychiatry hospitals-based approach to treatment is labeled as outmoded and is not effective largely.

To overcome this problem, what needs to be done is quite clear. This WHO report, on its page no.9, paragraph 5, said, "Large psychiatric hospitals need to be closed, and instead mental health treatment and care need to be provided through primary care centers and other community-based settings. For this transition to occur successfully, primary care workers must be trained and supported by more specialized service levels."

Essential services at PCCs are meant to identify & treat common mental disorders at initial stage, and if needed refer such patients to tertiary care. Apart from it, awareness for mental health needs of patients having physical symptoms, and to promote mental health with preventive measures are the other services which can be easily executed at primary care centers.

Treating mental disorders at primary care centers will make the treatment possible at its very initial stage, and that too holistically and near to home of the patient. In addition, primary care also gives ample opportunities to prevent mental disorders. Promotion of mental health will

also be possible at grass root level. Nonetheless for maximum effectiveness and efficient treatment, only primary care help is not at all be sufficient. It should be coupled with some higher centers to which they can refer the patients and can seek some support or can treat the patients under their supervision.

# NEED FOR THE MENTAL HEALTH TRAINING

General population is having a large chunk of patients having some problem with their mental health. About 25 to 30% of the patients visiting GPs are having such type of problems. But the agony is GPs fail to identify and treat their patients effectively. On the top of it, due to heavy flow of patients, they are so busy in their practice to treat physical symptoms, they are doubtful whether treating mental problems come under their domain or not. The reason behind misdiagnose is not the lack of time devoted to the patients only, but few basic skills are also required to establish the right diagnosis. Basically GPs are trained in medical colleges to make their diagnosis on the basis of physiological and pathological reports, but not psychologically.

In a recent study published in Lancet Psychiatry in 2017, done by "Centre for Chronic Conditions and Injuries, Public Health Foundation of India, New Delhi, India", shows the plight of mental health care. It states that despite enough data available supporting pharma and psychosocial interventions in treatment of depression, but on contrary maximum number of people are not receiving the same.

In another study published in Lancet 2010, titled "Effectiveness of an intervention led by lay health counsellors for depressive and anxiety disorders in primary care in Goa, India (MANAS): a cluster randomised controlled trial" Prof. Vikram Patel of Goa says that the presence of the disorders is varying significantly between one primary care setting and the other with mean of 20%, but recognizing these disorders is not up to mark, with only less than one third of identification of the cases which are clinically significant.

Another study published in 2018 titled, "Recognition of major depressive disorder and its correlates among adult male patients in primary care" was done by Sutanaya Pal, RajatM. Oswal and Ganpat K. Vankar of Medical College Baroda, Vadodara. This study concluded with the finding that Primary care doctors were not able to make diagnosis in a significant number cases suffering from depression. This finding further emphasises the need for general practitioner's training, so that they can make an early diagnosis and may their referral rate will thus improve. In year 2018, Dr. Om Prakash Singh from "Department of Psychiatry,

AMRI Hospital, Kolkata", published a study with a title, "District Mental Health Program - Need to look into strategies in the era of Mental Health Care Act, 2017 and moving beyond Bellary Model." It mentioned about the concept of decentralise mental health services, by providing the same by integration of mental health with delivery system of general healthcare. The same concept was a part of "District Mental Health Programme (DMHP)", started under the "National Mental Health Programme (NMHP)", adopted in 1982.

India was the leading among developing countries to implement this programme, but it still lags behind in terms of workforce development, mental health professional training, and combining mental and physical health. To achieve the objective, pilot projects were started in Bellary district. The "Bellary model" indicated that primary care doctors & staff can be trained under supervision for the identification & management of certain types of mental disorders. The study also mentioned "The National Mental Health Survey" conducted by "NIMHANS", which discovered wide gap in treatment of mental disorders, ranging from seventy to ninety percent for different types of disorder, and the percentage was 85 for common mental disorders.

Knowledge and practices of general practitioners regarding psychiatric problems was carried out by. Choudhary and Mishra in 2007, in Ludhiana. The findings of this study were very interesting and relevant here. 79.7 percent of doctors who are not practicing in psychiatry were not aware of any diagnostic criteria to reach at right diagnosis. Moreover they never had any training to deal with mental health issues. The doctors were treating their patients by their own instinct. This finding is very much similar with the findings of Gautam and Kapur (1980) where it was found that 71.7% of GPs are without knowledge and training. 71% of primary care physicians felt said that psychiatric problems are very common in their daily practice. Total 100% of physicians were of the opinion that occurrence of these problems is on rise in population and all of them also felt that these problems are treatable. All physicians (100%) showed their concern by adding that these problems should be of serious concern and due attention must be given to them. 89% of primary care physicians stated that available services are not sufficient. A very big number, 95%, of GPs disclosed the expertise services are being utilized properly. The most encouraging point was that 98% of the primary care physicians were of the opinion that they are keen to learn more about the psychiatric problems and also the skill to manage that. Thus this study concluded with a strong recommendation of imparting training to the primary care physicians.

Mirosł and Jaworski (2014) say that it is but natural, if primary care physician lacks knowledge in psychology, he can miss the diagnose and will continue to treat the physical symptoms only, not the underlying mental disorder. Failure on the part of doctor to identify mental health problems can lead to serious consequences. And that's why many researchers are of the opinion that considerable knowledge of psychology to a medical professional is also needed apart from medical subject matter. In a study titled, "Mental disorders in primary care", Hans-Ulrich et al. (2003) stated that the study, understanding and managing mental disorders at primary care are very poor.

A Training manual was also published by "Minister of Health & Family Welfare, Government of India" and on the page no. 7, the following lines are written, "There is an inadequate exposure to psychiatry during undergraduate training in India. It has been observed that only 30-50% of the psychiatric patients are correctly diagnosed by the GPs. The rest remain undetected leading to delay in the treatment, unnecessary investigations for physical illness and the prolongation of overall disability in the patients. It has been demonstrated that the identification rate for psychiatric illnesses in General Practice / PHC can be significantly enhanced after adequate training of GPs in Mental Health. It will also address the poor scenario of mental health manpower in India It has been demonstrated in many countries, including India that a short-term training of GPs can result in improvement in their skills to identify, manage and refer the psychiatric patients visiting them."

A 2019 study by Ramanuj and Ferenchick, titled, "Depression in primary care—screening and diagnosis", was published in two parts. First part of the study clearly states that interventions based on system should make the GPs capable for both—screening and accurate diagnosis of depression where availability of treatment and follow-up are there.

In the second part of the same study, emphasis was given on the training to primary care providers. It says that in spite of their increasing role of treating depressive patient, the training part of primary care physicians is minimal. The extensively documentation of poor levels of identification and treatment in primary care is also been mentioned in this study. Lack of adequate training for depression is perceived as the cause for to meet the needs of the patients.

# PART 2

# 1 Identification the probable psychological symptoms

Brief Interview skills for assessing Psychological patients

Model of history taking of psychological patients

Applying GHQ-12 scale while interviewing

# 1.1 Basic Interview Skills for assessing Psychological Patients

To assess a person having some psychological problem needs some basic interview skills. Without these skills any general practitioners may not be able to develop a professional relation with his patient, forget about extracting relevant information from him

#### **Interview Skills**

Conducting interview effectively from the patient is an important step to gather some relevant information who may be having psychological problems. Thus conduction od interview is an important aspect to understand different aspect of psychological problem the patient may be having. During interview the interaction, which is formal in mature, generally happens between two persons. And if it is conducted in a scientific method, a lot of relevant and important information can be collected. Following are the few basicstips that interviewer must follow.

- A calm place is an ideal place for the Interview.
- Privacy of the individual must be respected and all for the interior must be according to that.
- Respect of the patient must be maintained and all his viewpoints must be accepted with an open mind. Adding adjectives like Mr. or Ms. must be added as prefix before the name of the patient, giving sense of respect to him.
- The interviewer must not be hasty in asking about problems of the patient. The attitude of the interviewer must be reflected in such a way, which reflects the impression that the person, who may be having some problems, is more important than his or her problem.
- Thus, interview must be started with some ice breaking conversation like asking the patient if he had faced any traffic jam during the journey, or some conversation about the

- prevailing whether conditions. It will make the patient more comfortable before the interview.
- Listening the patient is very important. No obstruction must be there in the conversation by asking any other question. No half-way suggestion is given to the patient.
- The behavior of interviewer must be like that which exhibit involvement in the conversation with the patient, like making eye contact, not reflecting any signs of disinterest (such as yawning, attending phone callsetc), are the behaviors which reflect sense to patient that his GP is very much involved.
- ➤ GP must not jump to conclusions or must avoid drawing any inferences from what so ever little information he gathers during interviewing. Sufficient time must be given to the patient for expressing his feelings and emotions.

# Model of interview:

- > The person must be welcomed.
- > Disclose your name and identity.
- ➤ The person must be addressed by his or her name, the name of the patient can be obtained from the file or OPD slip. As a mark of respect one can add 'ji' after name.
- > During the interview session, the person must feel comfortable.
- ➤ What brings the patient to the clinic, must be asked.
- ➤ Initial questions must be open ended like "when you are not able to work, how do you feel?" Never ask "Are you not able to work, do you feel sad?"
- ➤ "Close ended questions" must be asked later. Multiple options must not be asked at a time. So, instead of asking "Do you feel sad or angry?", ask them—"Do you feel sad?" wait for reply& then ask "Do you feel angry?"
- Listen the patient very carefully and must allow him/her to speak. Summarise in your own words what patient have said reflecting what has been understood.

**Also,** general practitioner must have brief assessment of current mental status of the person, e.g.:

- ✓ **Appearance**: Whether patient is tidy or untidy? Is he overdressed or dressed appropriately?
- ✓ **Speech**: Must observe if he speaks spontaneously or hesitantly? Also note if speech is loud or normal?

- ✓ **Emotion:** Also observe if the person looks happy, sad, angry or anxious. Did the patient expressed feelings if he was sad, happy or anxious.
- ✓ **Thought Process**: Simply listen to him speak; do the ideas/thoughts appear to be rationally connected? Is he constantly reporting on the incursion of any thought, &having some fixed beliefs despite contrary evidence?
- ✓ **Perception**: Is he reporting some perceptual abnormalities, like watching or hearing things when no corresponding stimuli is present (hallucination)?

#### COMMON PRINCIPLES IN ASSESSMENT

- »Make sure if communication is clear, compassionate & sensitive to differences in age, gender, culture & language.
- » Always be friendly, respectful, and nonjudgmental.
- » Simple and clear language must be used.
- » Be sensitively to the very personal information (e.g., about sexual attack or self-harm).
- » Share information in the terms which patients can understand.
- » Person must be asked for his personal understanding of his condition.

# > ASSESSMENT:

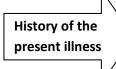
- » As appropriate, obtain medical & family history, along with history of present complaint.
- » Make a physical examination.
- » Any concurrent medical issues should be assessed, managed, or referred as needed.
- » Examine for psychological concerns, taking into account previous and current social and relationship troubles, financial troubles and other stressful events.

# 1.2 MODEL OF HISTORY TAKING:

History taking is significantly more in-depth, & includes information about the patient's family and personal background, as well as a personality assessment.



"Name, age, gender, education, marital status, occupation, religion, and circumstances of referral/reasons for visiting the clinic for the patient."



- \* Complaints of the patients must be in his own words
- \* Period, nature and development of symptoms
- \* Factors influencing the symptoms
- \* Any effect on interpersonal relations, job, kins & other spheres of life
- \* Sleep & Appetite
- \* Any previous treatment taken till date



- \* Age of Parents and siblings, their relationships with the patient.
- \*Any family history of psychiatric illness, suicide and mental retardation



- \* Childhood life & developmental mile stones.
- \* "Details of present occupation and financial status.
- \* Occupational history: jobs, work satisfaction, relationships with colleagues.
- \* Sexual practices, relationships, marriage
- \* In case of women: menstrual history, contraceptive pills, miscarriage/ termination of pregnancy."

Past Psychiatric and medical history

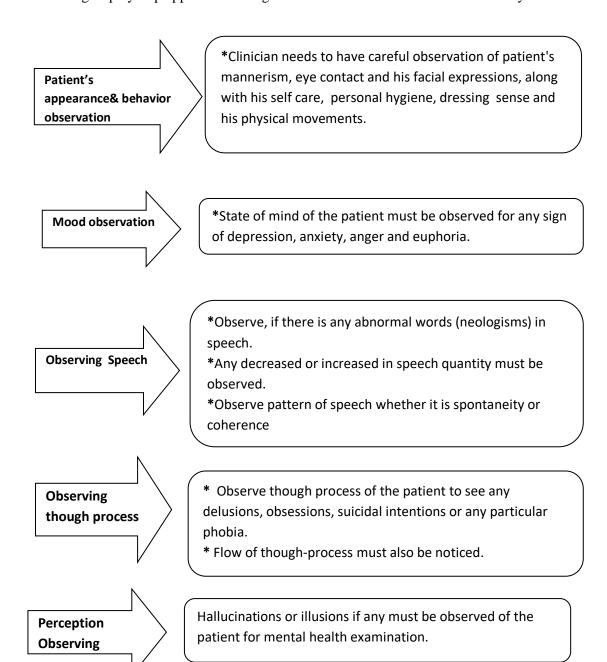
- \* Nature & occurrence of past psychiatric history
- \* Treatment & hospitalisations
- \* Past medical and surgical history
- \* Alcohol & drug abuse, tobacco

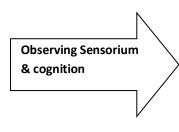
# 1.2.3 MENTAL STATE EXAMINATION

In Psychological assessment of a person, Mental State Examination is as important as Physical Examination in a general medical condition. Although it is little bit time consuming but its worth is far more greater than devoting the time.

This examination can also be quite difficult as sometime sign and symptoms of a patient are not easy to understand or interpret. However, one must remember without mental state examination, no clinician or psychologist can ever justify his diagnosis and treatment.

Following step by step approach is being laid to make mental state examination easy.





- \* Level of consciousness and orientation with time, place and person must be observed.
- \* Attention must be paid on memory of the patient
- \* General knowledge & intelligence of the patient keeping in view with educational background must be taken into account.

Observing
Judgment& insight
of patient

- \* Capability of patient's social judgment and his understanding of likely outcome of his behavior must be observed.
- \* Insight of the patient must be observed by looking awareness about his illness, level of understanding of his illness, along with willingness to accept treatment.

# 1.3 Applying GHQ-12 scale while interviewing

As the name shows, there are twelve different questions in GHQ-12 scales. Every GP must ask these question to every patients he examines. These questions should be asked during the history taking, no separate paper be used to write down the reply of the patient. If the general practitioner suspects the patient having some psychological problem, then the GHQ-12 scale should be duly filled.

"The following are the twelve questions, which must be asked by the general practitioner.

- 1. Been able to concentrate on what you are doing?
- 2. Lost much sleep over worry?
- 3. Felt that you are playing a useful part in things?
- 4. Felt capable of making decisions about things?
- 5. Felt constantly under strain?
- 6. Felt you couldn't overcome your difficulties?
- 7. Been able to enjoy your normal day to day activities?
- 8. Been able to face up to your problems?
- 9. Been feeling unhappy or depressed?
- 10. Been losing confidence in yourself?

- 11. Been thinking of yourself as a worthless person?
- 12. Been feeling reasonably happy, all things considered?"

# 2 Prioritising the clinical symptoms

- Rule out organic cause (by basic blood investigations, Ultra sounds and ECG)
- Recognising mental health problems
- To investigate whether the problem is self inflated, environmental or Biological

# Mental Health and Different Mental Health Disorders

Mental health encompasses not just absence of mental disorders, it is an important component of total health. "Health is a condition of total physical, mental, and social well-being, not only the absence of disease," defines WHO.

Thus, mental health is a state of well-being in which:

- Each person fulfils his own potentials,
- ➤ Able to cope with typical life stresses,
- ➤ Able to work successfully & fruitfully,
- ➤ Able to contribute to his community.

# **Mental Health Problem**

A person can have "mental health problem" when heis:

- > Unable to realise his own potential,
- > Unable to manage normal life's stress.
- ➤ Unable to work efficiently &productively.
- Unable to make any contribution to society.

# **Mental Disorders**

The presence of a set of symptoms is used to diagnose mental diseases (e.g., the ones mentioned above). Different mental diseases are defined based on the prevalence of symptoms. When the disruption is largely in the mood domain, the connected diseases are referred to as "mood disorders." Similarly, a mental disease known as 'schizophrenia' is marked by cognitive and perceptual abnormalities. However, it is worth noting that, while the preponderance of a symptom (or group of symptoms) might serve as a leading point for the diagnosis of a mental condition, a patient can also show signs of distress in other areas.

Mental illnesses have a negative impact on a person's life from a variety of angles. For example, not only is the cost of therapy burdensome, but other repercussions such as difficulty maintaining job and disruption in interpersonal relationships are also debilitating. As a result, early detection of a disorder and provision of assistance to the individual can make a big impact in the individual's life.

# PREVALENCE OF PSYCHOLOGICAL DISORDERS IN GENERAL PRACTICE

As per training module published by "Minister of Health & Family Welfare Government of India for General Medical Practitioners on diagnosis, treatment and care of common MNS (Mental, neurological and substance use)", the prevalence of psychiatric disorders is as follow:

- ➤ According to a "WHO cross-cultural research" of 14 centres around the world, 25% of PCC attendees had one or more diagnosable psychiatric problems.
- ➤ The "WHO Cross-Cultural Study" Indian Centre in Bangalore discovered that 22.4 percent of PCC attendees had one or more diagnosable psychological problems.
- > Depression, anxiety disorder, alcoholism, and somatoform disorders are the most frequent psychiatric illnesses seen in general practice.
- ➤ Approximately 1/3<sup>rd</sup> patients with psychiatric issues are having medical conditions as well. If untreated, might result in delayed or incomplete recovery.
- ➤ In India, there is insufficient exposure to psychiatry during undergraduate studies. Only 30-50 percent of psychiatric patients are identified appropriately by general practitioners, according to studies. The rest go unnoticed, resulting in therapy delays, unnecessary physical sickness investigations, and patients' total handicap being prolonged. After sufficient training of GPs in Mental Health, identification rate in General Practice greatly improved. It would also solve India's shortage of mental health professionals.
- ➤ It has been established that GPs may increase their ability to detect, manage, and refer mental patients who visit them with short-term training.
- > GPs' primary responsibilities include mental patient identification, management, referral and follow-up care.

### Recognising mental health problems:

People with mental health issues may have abnormalities in their thinking, emotion, physiology, and behaviour. As a result, people may experience problems with their sleeping pattern, frequent mood change, disturbance in social & intellectual functioning, change in behavior, change in thinking & perception, lack of concentration etc.

### **Factors affecting mental health:**

A number of factors are responsible for the disturbed mental health. The main factors are being discussed here.

#### > Social Factors :

Social expectations and esteem are the major factors affecting the mental health of an individual. Individuals' perceptions of themselves ultimately shape who they are, their strengths, and what they can achieve. Having both too low and too high self-esteem can be harmful to one's mental health. Self-esteem has a significantly bigger impact on a person's overall happiness and quality of life. Aggression, violence, self-deprecating behaviour, anxiety, and other mental problems can all originate from low or high self-esteem. Bullying and other forms of emotional abuse can occur from not fitting in with the crowd. Bullying can lead to feelings of melancholy, rage, and isolation.

### Socio-economic status and mental health:

A number of studies have found a link between poverty &mental illness. The bottom line is that the lower a person's socioeconomic standing, the greater their risk of mental illness. Impoverished people in fact are having chances to develop mental illness by two or three folds than those of a higher economic class.

### **Biological factors:**

Anything physical factor that can cause adverse effects on a person's mental health comes under Biological factors. This includes genetics, prenatal damage, exposure to toxins, substance abuse, infections and brain defects or injuries, many professionals believe that the sole cause of mental disorders is based upon the biology of the brain and the nervous system.

### **Bio-psycho-social model:**

The primary model of contemporary Western psychiatry is that of bio-psycho-social model (BPS), which merges biological, psychological and social factors all together. For

example one view is that genetics accounts for about 40% of an individual's susceptibility to mental disorders while both psychological and environmental factors account for the other 60%. It may be commonly neglected or misapplied in practice due to being too broad or relativistic.

The most common view is that mental disorders tend to result from genetic dispositions and environmental stressors. These factors combine to cause patterns of distress or dysfunction or, more sharply, trigger disorders.

### > Neurotransmitter systems ;

Abnormal levels of dopamine activity have been *correlated* with a number of disorders (e.g., reduced in ADHA and OCD and increased in schizophrenia). Dysfunction in serotonin and other monoamine neurotransmitters (e.g. norepinephrine and dopamine) and their associated neural networks, are also moderately correlated with certain mental disorders, including major depression, obsessive compulsive disorder phobias, post traumatic stress disorder and generalised anxiety disorder. Studies of depleted levels of monoamine neurotransmitters show an association with depression and other psychiatric disorders.

### The important psychological attributes which are commonly assessed;

- ➤ Cognitive abilities such as "intelligence, attention, memory, problem solving, abstraction, comprehension, executive function, planning, learning etc.
- Personality, temperament, adjustment, coping, ego functions, interpersonal relationship, frustration and stress tolerance etc.
- > Stress, fear, anxiety, conflicts, reality testing, psychopathology, frustration, emotions, insecurity, anger, hostility" etc.

## 3 Identifying the common mental health problems

Skill of identifying different type of psychological problem

Skill of judging the severity of problem

Criteria of selecting the patients for referral to higher centres

## 3.1 Skill of identifying different type of psychological problem

"Psychological assessment" is an important element of providing mental health services and is done for the following reasons:

- ➤ Helping to reach at a diagnose of mental disorders
- ➤ Identifying strengths & weakness of concerned individuals
- ➤ Identifying psychological impact of the disorders
- ➤ Identifying & estimating intensity of emotional & behavioural problems of an individual.
- Understanding psychological factors influencing in developing &maintaining mental disorders
- > Planning & implementing interventional strategies.
- ➤ Monitoring effectiveness of intervention.

The following are some of significant psychological characteristics that are frequently measured in the delivery of mental health services:

- Cognitive abilities like "intelligence, attention, memory, problem solving, abstraction, comprehension, executive function, planning, learning etc.
- Personality, temperament, adjustment, coping, ego functions, interpersonal relationship, frustration and stress tolerance etc.
- Stress, fear, anxiety, conflicts, reality testing, psychopathology, frustration, emotions, insecurity, anger, hostility" etc.

## Relationship between Physical & Mental illness

- A major challenge for a general practitioner is determining the extent in which physical & mental diseases contributed to a patient's presenting symptoms.
- ➤ Psychiatric symptoms that arise as a result of a physical ailment, Physical illnesses, particularly chronic or fatal illnesses, as well as those with severe symptoms & significant levels of disability can trigger mental illness. "HIV infection, cancer, burns, chronic airway disease, chronic renal failure (particularly during dialysis), mastectomy, and other disfiguring operations" are examples of physical diseases.
- ➤ It's difficult to diagnose depression in setting of physical problem because some symptoms, such as "fatigue, loss of appetite, weight loss and poor energy levels", could be caused by either ailment.

Take note of any symptoms that aren't explained by the physical condition. Keep in mind that depressed persons may experience a worsening of their physical problems. When any of the following signs are present, always consider a diagnosis of depression: "persistent feelings of worthlessness and guilt, anhedonia, hopelessness, suicidality, panic attacks, or psychomotor retardation or agitation".

## Physical disorders that can cause psychological symptoms;

- Any organic condition or drug which affects the central nervous system directly or indirectly might create psychological symptoms. These symptoms include not only delirium and dementia-related cognitive alterations, but also any additional abnormalities discovered during a mental status check. In the hierarchy of diagnosis, organic disorders lies on the top and all persons who appear with psychiatric symptoms should be evaluated for them.
- You should be especially suspicious of aged people who are getting treatment for medical problems or are presenting with psychiatric symptoms for the first time. Conduct a thorough mental health examination, with a focus on cognitive function assessment. Make a list of any physical symptoms, medications you're taking, and recreational drugs you're using. Follow up with a physical exam and investigations if necessary.

## Mental disorders that present with physical symptoms;

- ➤ Depression and anxiety disorders are frequently associated with physical symptoms. Physical complaints are common in those suffering from psychotic diseases. For example, a guy suffering from psychosis may have "hypochondriacal delusions" (e.g. belief that his bowel is rotting). Schizophrenic patient may experience somatic passivity (for example, believing that laser rays from a nearby television station are causing his back discomfort).
- ➤ Depression & anxiety frequently present with physical symptoms in general practice level.

### Physical illness which happens indirectly because of a mental illness;

➤ Patients with persistent schizophrenia or alcoholism are more likely to develop a variety of physical ailments linked to inadequate self-care (for example, "pneumonia, smoking-related diseases, diverticulitis, poor dental health, subdural haematoma, and scabies"). These people generally not ask for medical assistance, and if treated, they

would be uncooperative with treatment. Negative sentiments among medical personnel may indicate that they are receiving substandard care.

Carry home message; "People with chronic mental illnesses often suffer poor physical health."

### 3.1 Skill of judging the severity of problem;

The skill of judging the severity of psychological problem is very important. The systematic use of psychological scales mentioned in this interventional training is basic necessity for it. The corresponding scores of the patient for any particular psychological problem will determine whether the patient is having mild problem, moderate or severe problem.

### SEVERETY OF ANXIETY

- ➤ If a patient of Anxiety is having his score between 0-4, the patient is having minimum anxiety, which is normal.
- ➤ If a patient of Anxiety is having his score between 5-9, the patient is having mild anxiety.
- ➤ if a patient of Anxiety is having his score between 10-14, the patient is having moderate anxiety.
- ➤ if a patient of Anxiety is having his score between 15-21, the patient is having severe anxiety.

The corresponding other basic features like palpitation etc are also gives you a clue of severity of the problem.

### SEVERETY OF DEPRESSION

- ➤ If a patient of Depression is having his score between 0-4, the patient is having no depression.
- ➤ If a patient of Depression is having his score between 5-9, the patient is having mild depression.
- ➤ if a patient of Depression is having his score between 10-14, the patient is having moderate depression.
- ➤ if a patient of Depression is having his score between 15-19, the patient is having moderately severe depression.
- ➤ if a patient of Depression is having his score between 20-24, the patient is having severe depression

The corresponding other basic features like feeling of sadness, crying etc are also gives you a clue of severity of the problem.

### SEVERETY OF SOMATIC SYMPTOM DISORDER

- ➤ If a patient of SSD is having his score between 0-4, the patient is having no SSD.
- ➤ If a patient of SSD is having his score between 5-9, the patient is having mild SSD.
- ➤ If a patient of SSD is having his score between 10-14, the patient is having moderate degree of SSD.
- ➤ If a patient of SSD is having his score more than 15, the patient is having severe form of SSD.

## 3.3 Criteria of selecting the patients for referral to higher centers;

Every General practitioner is serving the society as a primary care center; he can't treat all the patients. Same is true for psychological patients. They may need expert opinion and some therapies which only a qualified clinical psychologist can give.

The following points must always be remembered while treating the patients.

If a patient of anxiety is having severe form of anxiety from the last fifteen days constantly, he must be referred to a higher center. If a patient of depression is having severe form of depression or having some suicide ideas or having the history of failed suicidal attempt, that patient must be referred to a higher center. If a patient of somatic symptom disorder is having severe form of SSD from the last fifteen days constantly, he must be referred to a higher center. The other symptoms like chest pain can also need referral to a cardiologist to rule out any cardiac problem.

### When to refer a patient?

### **Referrals for Common Psychological Problems:**

## 1. Nature of illness

When the patient is having severe symptoms, or having suicide ideas, or harming others or himself, or having very aggressive behavior or refusing to take his normal meals.

## 2. Nature of treatment

When there is no improvement or insignificant improvement in condition of the patient or when ECT or any other specific therapy is required.

## 3. Support system

When patient is homelessness or there is no one in the family to take care of him.

## When to refer a patient of SSD?

Following are few indicators that must guide general practitioners for referring to psychiatrists;

- Diagnostic confusion
- When nature of illness is very severe
- If there is any attempt or even threat for suicide.
- Presence of some other psychiatric problem like severe depression.
- When there is no improvement or insignificant improvement in condition

### When to refer patient of Depression:

- When patient develops some psychotic features
- If there is any attempt or even threat for suicide.
- When there is no improvement even with two antidepressants or insignificant improvement in condition
- When ECT or any other specific therapy is required.
- When patient is having bipolar disorder

## 4 Analysing the health issues

Understanding and diagnosing Anxiety

Understanding and diagnosing depression

Understanding and diagnosing Somatic symptom disorder

Use of different diagnostic tools—GAD-7, PHQ-9, PHQ-15

### **ANXIETY**

It's normal to feel worried now and then. Similarly, certain situations make the majority of us uncomfortable. However, if a person is constantly anxious, it is an indication of anxiety and a mental health problem. Anxiety can emerge in a number of ways. For example, extreme anxiety might be accompanied by specific physiological symptoms such as increased heart rate and giddiness, as well as other fears such as fear of death, losing control over himself and his surroundings, and so on.

These are referred to as "panic attacks." People who suffer from "panic attacks" frequently avoid crowds, social groups& public locations where they may be all alone. People may begin to avoid their daily tasks owing to their dread of panic attacks, which can be highly crippling. Some people, on the other hand, suffer from chronic anxiety. The concerns are referred to as 'free-floating anxieties' since they are persistent. "Generalized Anxiety Disorder" is the name given to this disorder. People with "Generalized Anxiety Disorder" are fearful that something bad will happen are worried, have muscular tension, and have difficulty relaxing.

## Identifying anxiety disorders

- When patient is feeling nervous
- Somatic symptoms like increased heart rate, dry mouth, pains in different muscles, headaches etc.
- ➤ When there is restlessness without any reason or disproportionate restlessness in comparison to demand of situation.

## **Different Types of Anxiety**

### **Panic Disorder**

Unexpected panic episodes that don't seem to have any cause. Avoiding situations that have resulted in panic attacks. For instance, a patient may have tremendous fear & avoid to leave his house alone (agoraphobia).

### > Social Anxiety

Fear of social situations or performance that is excessive or unrealistic. Intolerance of public humiliation or scrutiny. Example: A shy person is unable to speak in front of a

group. "Social Anxiety Illness" is another anxiety disorder that is widely noticed. Most of us experience anxiety in situations where we are likely to be judged by others, such as a job interview or public speaking. Individuals with this disorder exhibit severe uneasiness in social situations, as well as physiological signs such as dry mouth, trembling, and other symptoms.

### **Obsessive Compulsive Disorder**

Presence of obsessions ("Intrusive thoughts, images, or urges that cause anxiety"). Presence of compulsions ("Repetitive behaviours or mental acts that are performed to reduce anxiety").e.g.: A person cleans his hands again and again because he is afraid of germs.

## > Specific Phobia

Avoidance is frequently coupled with irrational dread of a specific thing or circumstance. For example, a person who is terrified of flying is unable to travel by plane.

### **➢** Generalized Anxiety Disorder

Uncontrollable and excessive worry occurring most days about ordinary activities. <u>Intolerance of uncertainty.</u> Example: A person worries a lot about harm coming to their family members on a routine trip to town.

### > Post Traumatic Stress Disorder

Occurs after a traumatic event to which a person responds with intense fear, helplessness, or horror. The person relives the event in memories or dreams; avoids reminders of the event and experiences symptoms of increased vigilance.

**Example**: A person returns from war and relives the battlefield traumas in his nightmares and startles at the sound of loud noises.

## **DEPRESSION**

### **Understanding Depression:**

At present depression is world's third greatest source of disease burden, with projections indicating that the burden will only increase. It will be first cause of illness burden by 2030, as per World Health Organization (WHO, 2008). It is characterised by a persistently

depressed mood and we all encounter low mood at some point in our lives, but low mood experienced by those with depression is not same as sadness experienced on a regular basis. Depressed people's unhappiness is all-encompassing and long-lasting. In other words, they are depressed practically all of the time, almost every day. Excessive irritation or wrath can sometimes accompany a depressed mood.

Along with depressed mood, there are a number of other signs to be aware of. A person with depression may lack interest in things that he previously enjoyed, thus may not continue his hobbies as vigorously as he once did. He may have low energy all the times, leading to low activity level, and he may even stop doing fundamental daily tasks like brushing their teeth and showering. Other symptoms of depression include frequently crying, becoming overly sensitive, losing confidence, reducing social connections and finding it difficult to concentrate on tasks/work as well as before. Some people with depression have memory problems and become forgetful as a result of their focus problems. Sleep & appetite can be affected as well. Some people with depression experience a decrease in sleep and/or appetite, while others experience excessive sleep / hunger. Few people suffering from depression can begin to feel pessimistic about the future& life, and they can wish to die or make suicide plans or may attempt for same.

Causes of depression are variety of psychological, biological, and social variables, as well as their interconnections. People who have had or are experiencing adversity in their lives (such as job loss or loss of love ones. Depression may lead to increased stress & dysfunction, as well as a worsening of the affected person's circumstances. Depression and physical health have a symbiotic relationship.

## **Identifying Depression**

- Continuously feeling low.
- Not able to enjoy things which were enjoyed earlier.
- Feeling lack of energy or getting tired very soon
- Reducing level of confidence.
- Reducing concentration
- Difficulty in sleeping and lack of appetite.
- A sense of hopelessness
- No or minimum desire for life
- Multiple unexplained physical symptoms.
- Feeling difficulty in completing the usual tasks, domestic or social.

## **Frequent Asked Queries:**

### Who gets depressed?

Anyone can have depression. Triggering factors for depression can be anything; for example, loss in business, demise of a loved one, or living in a pathetic conditions.

### Here are some examples:

- 1. Narinder has been introverted since the death of his wife, and he spends time reflecting about happier times and his shortcomings as a spouse. He sees no need to live any longer.
- 2. Jyoti suffers from persistent back pain and is unable to care for her family. She feels bad about it, as well as her irritation. She has stopped caring for herself and sees no future for herself.
- 3. Tony is a single father of three kids who works as laborer, and feels helpless to deal with all of his difficulties as he tries to make ends meet. He wishes he could just give up most days.

### Why are some of us more vulnerable to depression than others?

Some of us are more susceptible to depression. Trauma survivors and those with a family history of depression may be more vulnerable than others.

Some prevalent beliefs, such as "In order to feel good about myself, I should always achieve well in everything...", can lead to depression. "I have to please everyone all of the time..." "I must never make a blunder..."

Loss of cultural identification, social isolation and lack of appropriate support from society can make people prone to depression, especially for newcomers and minority groups in communities. Even minor adjustments in lifestyle, such as moving, eating different meals, or changing the weather, can have a significant impact on one's overall well-being.

### Isn't it just brain chemicals out of balance?

While our brain chemicals are most likely out of balance, our backgrounds, circumstances, social supports, and resources all have a role in whether or not we become depressed.

### Why doesn't depression just go away?

Depression is much more than ordinary grief or sadness. Depressive thoughts & feelings of worthlessness, helplessness& guilt are common. Depression's weariness and sluggishness can cause us to retreat, delay or having difficulties in concentrating. Sleep, appetite & sex desire can all be altered. When we feel depressed, we find it difficult to appreciate life. The most gloomy and unpleasant features of a scenario dominate our thoughts. We start blaming ourselves. All of these symptoms make it very impossible to cope with even minor daily duties. We grow more depressed the less we perceive us coping. All of these emotions, attitudes, and behaviours contribute to the persistence of depression.

### What can be done about depression?

The good news is that there are a variety of treatments for depression. According to research, treating depression with a combination of treatments yields the best results. Medication, therapy, and self-management activities are among them (in various combinations). When depression is treated early with self-management, the chances of a positive outcome are much higher. It's beneficial to have a holistic approach to mental health, which includes being in harmony with one's family, community, and environment. Identifying the qualities of family and community also plays an important part in assisting individuals in regaining their sense of equilibrium.

### SOMATIC SYMPTON DISORDER

Somatization disorder is one of the most commonly recognised conditions in 'general health care' settings. The frequent reporting of multiple bodily complaints is a defining hallmark of this illness (often non-specific and vague). Even if results are negative and specialists informed them that there is no physical basis for their concerns, many patients continue to demand detailed medical studies. Though the commencement (or continuance) of physical complaints may be linked to the existence of any unfavourable life event or continuation of any negative condition, the patient is unaware that these occurrences are likely to have an impact on his physical problems.

### **Characterisation of SSD**

This disorder is characterised by substantial physical symptoms that cause considerable functional impairment but for which no medical explanation can be found despite thorough examination.

For a variety of reasons, both doctors and researchers are interested in finding such illnesses. Somatoform disorders, like mood and anxiety disorders, cause impairment in patient functioning and quality of life. Second, as a result of numerous consultations at clinic, laboratory tests, medications, subspecialty referrals, and surgical treatments, somatoform diseases are linked to higher health-care expenses and use. Third, persons with these diseases are far more complex and difficult to care for than those with most other mental illnesses.

### **Identifying Psychosomatic condition**

- > Repeated physical problems having no clear cut clarification, has been identified.
- ➤ Patient rejects any logic which suggests that no physical problem actually exist.
- ➤ Patient seeks extensive tests and investigations and also seek multiple appointments in hospitals on a regular basis.

### Things to remember

- ➤ Mental health is vital for everyone, and it entails more than just the absence of illnesses.
- > There are a number of common mental diseases that can be detected by observing their signs and symptoms.
- > In order to investigate signs of mental problems, interviewing skills are required.
- ➤ Clinical mental health services benefit from psychological assessment. Psychologists can utilise a few simple psychological tests/scales with little training.

Here are some simple educational guidelines for anxiety, depression, and somatic symptom disorder that address behavioural, cognitive, and physical aspects. In the following session, we will go through the topic in further depth.

Diagnostic category earlier known as somatoform disorders has been renamed "somatic symptom and related disorders" with introduction of "Diagnostic and Statistical Manual of Mental Disorders, 5th edition". The changes were made making them extra relevant in primary care settings. The fundamental hallmark of this disorder is anxiety of patient over physical symptoms which they attribute to a non-psychiatric illness.

Patients having "somatic symptom disorder" can be subjected to un-needed testing and treatments by general practitioners who treat symptoms for which there is no physiological

cause. Thus a proper diagnosis is necessary. Screening instruments can help determine whether or not a person has a somatic symptom condition.

In the "Somatic Symptom Disorder and Other Related Disorder" category of the DSM-5, there are five distinct diagnoses.

- (1) "Somatic symptom disorder
- (2) Conversion disorder
- (3) Psychological variables impacting a medical condition
- (4) Factitious disorder
- (5) Other specific and nonspecific somatic symptom disorders"

### **Notes to General Practitioners:**

- ➤ "Somatic Symptom Disorder and Other Related Disorders" is a set of disorders defined by somatic symptoms-related thoughts, feelings, or actions.
- ➤ Because somatic symptoms are in abundance for any medical ailment presented, this group represents psychiatric problems.
- ➤ When a physical symptom is focus of attention, causing distress and contributes to disability, a somatic symptom disorder may be present.
- ➤ Physical symptoms are common in anxiety disorders and mood disorders. Before diagnosing a somatic symptom disorder, clinicians must rule out somatic symptoms caused by another main psychiatric problem. When an anxiety or mood problem is successfully treated, somatic symptoms might improve dramatically.
- ➤ Somatic symptom disorder affects around 5% to 7% of the general population, making it among m basic care. These are found in at least 10–15 percent of patients visiting PCCs, according to Kurt and Oberil (1998).
- ➤ Patients who appear with acute somatic symptoms are predicted to have somatic illness in 20 to 25% of cases.
- > These disorders can start while a person is a kid, adolescence, or an adult. Females are more vulnerable to develop this disorder almost ten times more than males.
- Somatoform disorders are three times more coexist with anxiety or depression than would be expected by chance.
- ➤ A concomitant somatoform disorder was found in fifty percent of the patients with an anxiety or depression.

## Somatic Symptom Disorder Diagnostic criteria, as per "DSM 5

**A**. One or more somatic symptoms that are distressing or result in significant disruption of daily life.

**B.** Excessive thoughts, feelings, or behaviors related to the somatic symptoms or associated health concerns as manifested by at least one of the following:

1. Disproportionate and persistent thoughts about the seriousness of one's symptoms.

2. Persistently high level of anxiety about health or symptoms.

**3.** Excessive time and energy devoted to these symptoms or health concerns.

**C**. Although any one somatic symptom may not be continuously present, the state of being symptomatic is persistent (typically more than 6 months)".

## **Specify current severity:**

**Mild**: Only one symptom fulfilled as per specification of Criterion B.

**Moderate:** Two or more symptom fulfilled as per specification of Criterion B.

**Severe:** Two or more symptom fulfilled as per specification of Criterion B, plus multiple somatic complaints.

### (4) USE OF PSYCHOLOGICAL DIAGNOSTIC TOOLS:

### **Psychological Tests in General Practice:**

Although clinical psychologists undertake psychological evaluations in very specific and structured settings, general practitioners can use some of the simple self-administered scales or brief questionnaires in PCCs. However, such tests should only be used once general practitioners have received enough training in their application. With justification, general practitioners can be educated to utilise the following tests in PCCs to diagnose prevalent psychological issues.

1. "General Health Questionnaire (GHQ) - 12 Item

2. The eight-item Patient Health Questionnaire depression scale (PHQ-8)

3. The Generalized Anxiety Disorder Scale-7 (GAD-7)

4. The 15-item Somatization module from the Patient Health Questionnaire (PHQ-15)"

## **GHQ-12 Questionnaire**;

**GHQ-12 Scale**; GHQ-12 scale, developed by Goldberg and Paul Williams (1970), is going to be the first instrument to be used in this study. GHQ -12 is the shortest version of GHQ developed by Goldberg & Paul and is mainly concerned with the psychological well being of an individual.

In the past four weeks, have you				
encountered any of the following	OFTEN	SOMETIMES	SELDOM	NEVER
situations?				
(a) "Able to Concentrate				
(b) Loss of sleep over worry				
(c) Playing a useful part				
(d) Capable of making decisions				
(e) Felt constantly under strain				
(f) Couldn't overcome difficulties				
(g)Able to enjoy day-to-day activities				
(h) Able to face problems				
(i) Feeling unhappy and depressed				
(j) Losing confidence				
(k) Thinking of self as worthless				
(l) Feeling reasonably happy in				
general."				

## **SCORING GHQ-12**

Positive items	0(always)	3(never)
Negative items	3(always)	0(never)

Threshold score is 4 or more

## GENERALISED ANXIETY SCALE (GAD-7)

"Generalized Anxiety Scale, GAD-7", developed by Spitzer, will be used to assess anxiety among the patients. The response options in this scale ranges from 0 to 21, with four different responses—"not al all", "several days", "more than half the days", "nearly every day" by assigning scores 0,1,2,3 respectively.

Over the <u>last 2 weeks</u> , ho bothered by the following		Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxiou	us or on edge	0	1	2	3
2. Not being able to stop or control worrying		0	1	2	3
3. Worrying too much about different things		0	1	2	3
4. Trouble relaxing		0	1	2	3
5. Being so restless that it is hard to sit still		0	1	2	3
6. Becoming easily annoy	ed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen		oen 0	1	2	3
	Total score	= Add Columr		+ — +	
If you checked off <u>any</u> proto do your work, take care					
Not difficult at all	Somewhat difficult d	Very lifficult	E	extremely difficult	

GAD SCORE LEVE	EL OF ANXIETY	
0-4	Minimal	
5-9	Mild	
10-14	Moderate	
15-21	Severe	

PHQ-8 Scale; PHQ-8 items scale developed by Kroenke and Spitzer, will be used to identify depression in the patients.

PHQ 8					
	0	1	2 More	3 Nearly	
	Not	Several	than	every	
"Over the last 2 weeks how often have	at all	days	half the	day.	
you been bothered by the following problems?			days		
Little interest or pleasure in doing things					

- Little interest or pleasure in doing things.
- $2\quad \text{Feeling down, depressed or hopeless.}$
- 3 Trouble falling or staying asleep or sleeping too much.
- Feeling tired or having little energy.
- Poor appetite or overeating.
- 6 Feeling bad about yourself or that you are a failure or let yourself or your family down. Trouble concentrating on things such as reading
- 7 newspaper or watching T.V.
- 8 Moving or speaking so slowly that other people could have noticed. Or the opposite--being so fidgety or restless that you have been moving around a lot more than usual."

## Scoring of PHQ-8:

SCORING PHQ- 8	
None	0 to 4
Mild	5 to 9
Moderate	10 to 14
Moderate severity	15 to 19
Severity	20 to 24

PHQ-15 Scale; Somatic symptom disorder will be measured using "Somatic symptom module of the PHQ (PHQ-15)."

15 different questions are asked with three options—Not at all, A little and A lot.

## **PHQ 15**

"During the past 4 weeks, how much have you 0 1 2
Been bothered by the following symptoms? Not at all A little A lot

- 1. Back pain
- 2. Chest pain
- 3. Constipation, loose bowls (diarrhea)
- 4. Dizziness
- 5. Fainting
- 6. Feeling tired or having low energy
- 7. Feeling your heart pound or race
- 8. Headaches
- 9. Menstrual cramps or other problems with your periods
- 10. Nausea, gas or indigestion
- 11. Pain in your legs, arms or joints
- 12. Pain or problems during sexual intercourse
- 13. Shortness of breath
- 14. Stomach pain
- 15. Trouble sleeping."

## **Scoring of PHQ-15:**

## Scoring: PHQ-15

0 to 4 No somatic symptom disorder

5 to 9 Mild

10 to 14 Moderate

15 or Higher Severe

## 5 Interventions to Manage identified mental health problems

Different techniques of Interventions

Skills of using Positive Psychological Activity

Skills of using Applied relaxation

Skills of using Motivational Interviewing

Skills of using Generic counselling

### Different Brief Psychological Interventions (BPI) at G P level

## **Learning Objectives**

The objectives of this chapter are to impart basic interview skills to general practitioners for assessing psychological patients. Elaborating different techniques of brief psychological intervention and imparting knowledge in commonly used psychological tests which can easily be used in general practice setting are the other main objectives of this chapter.

### **Key Points for Brief Psychological Intervention;**

- ➤ BPI necessitates a multimodal, broad-based, expert strategy that addresses the important cause elements identified by the evaluation.
- ➤ In addition to BPI, family work and, if necessary, medication should be used sparingly.
- > The therapy of medication is not supposed to be separated from other features of BPI.
- ➤ When using "multimodal treatment", strong communication amongst the specialists involved is critical to maintaining case management coherence.
- > The internal and exterior worlds of young people: school, classmates, neighborhood, social care system and most importantly parents should all be considered.
- > Treatment and relapse prevention require psycho-education of young people, their parents, and other responsible adults.
- ➤ Listening and empathy are basic therapeutic skills that must be mastered, especially when risk is present.

- ➤ Performing frequent risk assessments alone identifies the risk but does nothing to mitigate it. Instead, therapists should concentrate on gaining a better grasp of the risks and taking steps to mitigate them.
- ➤ Anxiety, depression, and SSD should all be considered in the context of the patients' and their families' "life experience."

### **5.1 Features of Effective Brief Intervention**

- > Fundamental knowledge &skills
- ➤ Attitude of understanding & acceptance
- ➤ Active listening skills
- ➤ Basic knowledge related to cognitive behavioral &solution oriented approach
- Overall attitude of understanding and acceptance.

## 5.1 DIFFERENT TECHNIQUES OF INTERVENTION:

There are different techniques for the brief psychological intervention. But following are the time tested and validated techniques which can be easily used in day to day general clinical practice.

### 1. Psycho-education;

- ➤ "Psycho-education" is a procedure of providing education to people with psychological issues and their families in order to assist them cope better with their situation.
- ➤ The primary purpose of "Psycho-education" is to help patients and their families comprehend their condition (including the nature of the illness and treatment options) and to strengthen their ability to cope with it.
- ➤ Their own capacities, resources, and coping skills are enhanced, allowing them to make a longer-term contribution to their own health and well-being.
- ➤ Appropriate "Psycho-education" aids in the development of insight into illness by dispelling myths & stigma surrounding various mental conditions. As a result, the procedure aids in improving patients' and their families' scientific understanding of disorders.

## 2 Listening:

- ➤ "Active listening and appropriate response" are two most important abilities allgeneral practitioners must have while interacting with a patient or his/her family member.
- ➤ "Being able to communicate effectively" is a necessary skill in every interaction. Listening abilities demonstrate that you are attempting to comprehend the patient & also aid in the establishment of rapport. When a patient describes his symptom, the GP's "listening skills" provide a reliving effect.
- Listening makes patient feel important, valued & respected.
- ➤ When a GP listens intently to what patient says, it encourages patient to keep talking &express his/ her feelings. As a result, an important trait of a Psychologist is active participation in a conversation.

#### 3 Reassurance:

Giving patients and family member's reassurance lessens their fear or worry, which aids in the therapy process. It dispels any anxieties or scepticism concerning illness or difficulties. Patients and family members should be comfortable that treatment is available and that recovery is possible.

### 4 Solving Issues:

Problem-solving is a crucial part of therapy, as it entails providing direct & practical assistance to patient. The GP work for identifying major problem areas contributing to patient's mental health problems, breaking them down to specific & attainable and developing skills for coping specific concerns. A typical method is to break it down into four steps —

- ✓ 1. Define the problem,
- ✓ 2. Look for different solutions to the problem,
- ✓ 3. Choose the best answer and implement it, and
- ✓ 4. Review the solution if the first one didn't work.

### 4 Coping Enhancement:

During a crisis, there are two types of coping mechanisms that are commonly used:

1. Healthy/adaptive coping mechanisms which helps to resolve crisis or to manage situation wisely.

2. Unhealthy/abnormal which does not help to resolve the situation or resolve it temporarily. When improper coping methods are used during a crisis, it exacerbates the problem, such as drinking to relieve anxiety or cope with the crisis. A Psychologist works with patients and their families to improve healthy coping skills (such as sharing difficulties with family or friends).

## 5 Helping a person understanding cognition and behaviour

Specified therapies are there to help patients to change their problematic behaviour (such as "Cognitive Behaviour Therapy, Rationale Emotive Therapy"&others) that must only be performed by trained professional. There are a few tips that can help patients understand their cognition and behaviour in general. For instance:

- ➤ Our perspective to a situation determines how traumatic or non-traumatic the situation will be for us to a considerable extent. As a result, with broader perspective on circumstance and an awareness of its numerous components aids us in dealing with it more successfully.
- > Staying behaviorally active, avoiding procrastination, and managing our time properly, among other things, help us not only deal with challenges in our lives effectively, but also have a beneficial impact on our mental process. It's important to remember that, just as "positive thinking" leads to positive behaviour, so does positive behaviour contribute to positive thinking and mood.

# PART 3

### Different Brief Psychological Interventions at G P level

## **Learning Objectives**

The learning objectives of this chapter are that after completing it, GPs would have a basic understanding of the five psychological therapies that are brief in nature and can be performed simply in their clinics. Another learning objective of this chapter is to determine which intervention should be used for which psychological intervention.

In general practise settings, a variety of psychological therapies can be used to address common psychological issues. However, a lot of therapies have limitations that prevent them from being used by general practitioners. Limitations can come in the form of time constraints, general practitioner qualifications, a lack of sufficient training, and so on. Even while the majority of psychological interventions must be offered by a qualified clinical psychologist, there are a few interventions that can be easily administered by a general practitioner following sufficient training.

Clinical psychologists use a variety of psychological interventions, such as "Acceptance and commitment therapy (ACT), Cognitive behaviour therapy (CBT), Dialectical behaviour therapy (DBT), Emotion-focused therapy (EFT), Eye movement desensitisation and reprocessing (EMDR), Family therapy and family-based interventions, Hypnotherapy, Interpersonal psychotherapy (IPT), Mindfulness-based cognitive therapy (MBCT), Mindfulness-based stress reduction (MBSR), Narrative therapy, Play therapy (for children), Psychodynamic psychotherapy, Psycho-education, Schema-focused therapy, Solution-focused brief therapy (SFBT)" etc.

But after having some brainstorming sessions with the concerned specialists, four brief psychological interventions (BPI) were picked up which can be used by the general practitioners after getting a proper training from an expert person.

These four interventions are based from the recommendations of the psychiatrists and psychologists which are giving their inputs for the development of this training module.

- 1. Positive Psychological Activity
- 2. Applied Relaxation
- 3. Motivational Interviewing
- 4. Generic Counseling

## 1. POSITIVE PSYCHOLOGICAL ACTIVITY

Positive Psychological Activity, also known as Positive Activity Interventions, is a type of positive psychological activity (PAIs). These PAIs are simple, self-administered cognitive and behavioural methods that promote happy feelings, good thoughts, and positive behaviours in order to boost subjective well-being (i.e. happiness). Writing letters of appreciation, counting one's blessings, practicing optimism, committing acts of kindness, repurposing one's strength, and meditating on positive sentiments in oneself are examples of such practices.

### **Need for New Approaches**

Mental health in 21<sup>st</sup>century has come to be defined as the absence of mental illness as well as the presence of positive psychological resources. As a result, we anticipate positive psychology science playing a key role in the treatment of mental diseases, particularly mood disorders.

Depression is rising like anything, affecting more than 500 million people globally. The prevalence of Anxiety and Somatic Symptom Disorder is not less than Depression. All these three Psychological problems are most commonly seen by every medical practitioners with different clinical manifestations.

Despite the fact that psychotherapy and medication are proven effective treatments for mental disorders, but as per WHO, less than half of people with depression in the world, less than one-third in most areas, and fewer than one in ten in some nations receive treatment. This means that two-thirds of reported cases of depression go untreated in most parts of the world. Many people who are depressed are misdiagnosed even in industrialised countries. Lack of financial means, a shortage of educated clinicians, and the stigma associated with mental illnesses are all obstacles to successful care.

## Why Use Positive Activity Interventions to Manage Depression, Anxiety and SSD?

To supplement and psychotherapy therapies, cost-effective, fast-acting, effective, and longlasting treatments are required. Furthermore, studies have indicated that antidepressant medication is ineffective. SSRIsused to treat anxiety and depression have been linked to negative side effects such nausea, weight gain& sexual dysfunction, all of which can lead to early withdrawal. Finally, people on SSRIs are more likely to relapse than people taking "cognitive behavioural therapies", which offer patients methods for avoiding depressing thought patterns and behaviours.

According to some data, PAIs can work fast and for a long time. In a trial of mildly depressed people conducted PAIs resulted in a considerable reduction in depression with one week use, and the effects were there for six months. Participants in the 'placebo group', on the other hand, reported a brief rise in happiness before returning to their baseline levels of despair after a week. Within 15 days of practising a PAI, participants depressive symptoms decreased from severe to mild or moderate in another trial with seriously depressed people.

### **Summary and Conclusions**

Positive activity treatments are experimental programmes that attempt to create positive emotions. They have the potential to aid patients who failed to respondconventionally by supplementing traditional pharmacological and psychotherapy treatment. They are also less expensive, less stigmatising, and have no negative effects. BasicallyPAIs potentially act as protective factors against certain types of mental disease. Research has already shown that intentional activity can improve well-being, but more work is needed to test and tailor-made these interventions for PCCs, because ultimate goal is to promote happiness and thriving rather than just alleviating distressing symptoms.

## 2. APPLIED RELAXATION (AR)

The goal of this interventional treatment is to give a coping skill to a patient which allows him to relax quickly in order to reduce eventually eliminate his symptoms. AR has been used for "phobias, panic disorder, headache, pain, epilepsy, and tinnitus", according to a review of 18 controlled outcome studies. The findings suggest that AR outperformed placebo situations, and was just as successful as the other behavioural approaches tested. The results were maintained or further improvements were obtained during follow-up after 5-19 months.

### **Description of the Procedures in AR**;

Before beginning treatment, it is critical that the patient understands how Applied Relaxation (AR) will be utilised and why it should work in his or her instance. It is vital to provide basic description of the procedure, and linking its qualities to the individual patient's specific difficulties, based on a thorough behaviour analysis. When explaining procedure &its reasoning, it is helpful to offer patient a brief description (1-2 pages) so that he may follow along more readily with the presentation. It is convenient for patient to raise inquiries about any topics that are unclear. The description is kept by the patient and can be studied at home.

## **Progressive Relaxation:**

The initial phase of AR entails educating the patient to relax through gradual relaxation techniques. The "large muscle groups" are separated into two sections & worked through in following order during initial sessions:

- Session 1: Upper limbs, face, cervical area shoulders.
- Session 2: Lower limbs, chest& lumber area

The patient must sit in a comfortable position, and the general practitioner must demonstrate how to contract and then release the various muscle groups. The patient must do the same, and the GP must double-check that they are completed correctly, and any questions or unclear points must be addressed. The tension should be maintained for 5 seconds, followed by a 10-15 second relaxation of that muscle group before moving on to the next tension.

After the relaxation session, patients rate their level of relaxation on a scale of 0 to 100, with 0 being a completely relaxed condition, 50 representing normal, and 100 representing a completely tense state. The general practitioner should evaluate if the patient has any difficulties when completing relaxation techniques, and if assistance is required, it should be provided. The patient must do the relaxation exercises twice a day at home, ideally in the morning and at night.

### **Diaphragmatic Breathing**

"Diaphragmatic breathing", often known as deep breathing, involves contracting diaphragm, a horizontal muscle positioned between the thoracic and abdominal cavities. During this style of breathing, air enters the lungs, chest does not lift & abdomen expands.

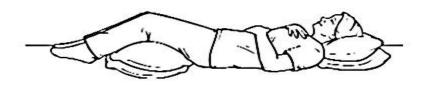
"Diaphragmatic breathing" or "Eupnea" as it is known in scientific terms, is a natural & relaxed breathing pattern found in all mammals. It is a state of calm in mammals that happens when there is no evident danger in their environment.

As per University of Texas, "Diaphragmatic breathing allows one to take normal breaths while maximizing the amount of oxygen that goes into the bloodstream. It is a way of interrupting the 'Fight or Flight' response and triggering the body's normal relaxation response." Deep breathing exercises are occasionally employed as kind of relaxation that, when followed on a daily basis, can help to relieve or avoid stress-related symptoms such as "high blood pressure, headaches, stomach problems, depression, anxiety", and others.

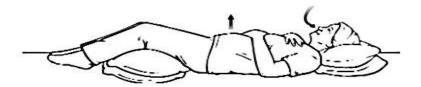
Diaphragmatic breathing is often used to enhance a range of characteristics, including "pulmonary function, cardio-respiratory fitness, respiratory muscle length, and respiratory muscle strength", notably in patients with chronic obstructive pulmonary disease". Diaphragmatic breathing exercise is especially important for asthmatics because their breathing is thoracic in nature.

### Diaphragmatic breathing technique;

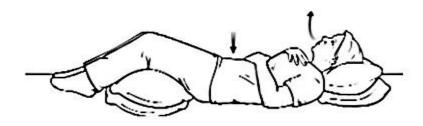
Lie flat on your back on a level surface or in bed with your legs bent and your head supported. Place a pillow under your knees to help support your legs. One hand should be on the chest and the other directly below the rib cage. As you breathe this way, you'll be able to feel your diaphragm move.



Inhale slowly through your nose, allowing your belly to move out against your hand. Keep your hand as still as possible on your chest.



Exhale through squeesed lips while tightening abdominal muscles. Keep your hand on upper chest as still as possible.



When learning the diaphragmatic breathing technique, you may find it simpler to follow the directions while lying down, as seen above. At beginning, do this exercise for five to ten minutes, 3-4 times per day. Gradually keep on increasing the duration of time for the exercise, and you may even make it more difficult by placing a book on your stomach.

## **3.** MOTIVATIONAL INTERVIEWING INTERVENTION:

Motivational intervention is broadly defined as any clinical strategy designed to enhance motivation of the client for change. It can include counseling and client assessment. This intervention can go up to multiple sessions, or can be completed in a 30-minute brief intervention.

### **Elements of Effective Motivational Interventions**

Investigators have looked for the fundamental components of effective interventions—the most important and common characteristics that inspire positive change—to better understand

what motivates people to reduce or change. Current motivational approaches include few key elements like, "The FRAMES approach, Decisional balance exercises, Discrepancies between personal goals and current behavior, Flexible pacing, Personal contact with clients not in treatment." Among these FRAMES approach is most important and is going to be discussed here.

## **FRAMES Approach**

Six elements were identified, and acronym FRAMES was coined to encapsulate them.

- *Feedback* regarding personal risk is shared with client, followed by assessment of associated problems.
- *Responsibility* to change is placed directly & clearly on patient (with respect for the patient's right to make choices for himself).
- Advice to bring a change in thought process of patient in non-judgmental manner.
- *Menus* of self-motivated change & treatment options are there to offer the patient.
- *Empathic* counseling in a respectful manner & understanding--is must.
- Self-efficacy is engendered in patient to bring change.

Since the development of the FRAMES construct, additional research and experience have broadened & polished components of this motivational paradigm. All elements had blended in different varieties & tested at variety of places and cultures. As a result, more tools are now accessible that are customised to match the needs of your clients.

### Motivational Interviewing as a Counseling Style;

"Motivational interviewing is a way of being with a client, not just a set of techniques for doing counseling." Miller & Rollnick, 1991

"Motivational interviewing" is a strategy of becoming a facilitator of change and getting your client's acceptance. It's a manner of interacting with patient which is more than just an alternative to other therapeutic approaches, and it's a counselling style which helps clients overcome ambivalence that keeps them achieving their own goal.

While few people can change by their own, other needs more formal treatment and assistance throughout their recovery process. Motivational interviewing is an important preliminary to later therapeutic treatment, even for clients who are not ready.

Basically "Motivational interviewing" is counseling style which is having the base of following assumptions:

- Ambivalence regarding change is common, and it can be a significant motivator in recovery.
- Work with your patient's inner motives &values to resolve ambivalence.
- Your client and you have formed a collaborative collaboration in which you both provide valuable skills.
- A sympathetic, supporting, yet directive counselling style creates an environment conducive to change. Aggressive confrontation and direct debate may enhance patient's defensiveness and restrict the chances of behavioural modification.

## **Five Principles of Motivational Interviewing:**

Miller and Rollnick argued in their book "Motivational Interviewing: Preparing People To Change Addictive Behavior" that motivational interviewing has a practical focus. "Motivational interviewing" tactics are more influential, and helpful rather than adversarial. The motivational interviewer must approach the situation with a clear purpose, defined tactics & abilities for achieving that aim.

The clinician employs five broad ideas when conducting motivational interviews:

- 1. Demonstrate empathy by listening with intent.
- 2. Developing discrepancies between the aims or values of your clients and their existing behaviour.
- 3. Avoid direct confrontation and debate.
- 4. Work with the client's reluctance rather than against it.
- **5.** Encourage optimism and self-efficacy.

## 1 Express Empathy

Empathy, as per Miller and Rollnick (1991) "is a specifiable and learnable skill for *understanding* another's meaning through the use of reflective listening. It requires sharp attention to each new client statement, and the continual generation of hypotheses as to the underlying meaning."

Empathic motivational interviewing creates a secure and conducive environment in which difficulties may be discussed and personal reasons and techniques for change can be elicited. Understanding every patient's individual viewpoint is an important part of motivational interviewing. Acceptance, rather than approval or agreement, should be your attitude toward change, as ambivalence regarding change is to be expected. When you and your client build a trustworthy relationship, motivational interviewing is most effective.

## 12 examples of such non-empathic responses identified by Gordon in 1970:

- 1. *Giving directions*. Directions are given in an authoritative tone. The speaker could be in a position of authority (father, boss), or the comments could be framed and uttered in authoritarian manner.
- 2. *Giving Warnings*. These are similar to orders, but include a threat of negative consequences if advise or guidance is not followed. "If you don't listen to me, you will repent," for example, could be a threat that the doctor will carry out if the patient does not cooperate.
- **3.** Giving suggestions prematurely or when unsolicited. Based on the GP's knowledge & personal experience, the message suggests a course of action. "What I would do is..." is a common term used in these proposals.
- 4. **Persuading with arguing or lecturing**. These messages are based on the presumption that the client has not effectively reasoned through the situation and requires assistance.
- 5. *Preaching patients their duty*. To express moral directives, these propositions use words like "should" or "ought."
- 6. *Criticising or blaming*. These signals mean that there is an issue with patient or what the patient has communicated. Even minor disagreements can be construed as negative.
- 7. *Praising*. Praise or acceptance can also be an impediment if communication implied agreement with what the client said. unwanted approval can disrupt the communication process and indicate imbalance in doctor-patient connection.
- 8. *Shaming, or abusing*. These communications show outright displeasure and the desire to modify a particular behaviour.

- 9. To make interpretations or analysing: Doctors are often inclined to impose their own interpretations on a client's statement in the hopes of uncovering some underlying meaning. Interpretive remarks means physician is aware of the client's true issue.
- 10. Sympathising or consoling. Doctors frequently provide consolation to clients in order to make them feel better. Such assurance can disrupt the flow of dialogue and make it difficult to listen carefully.
- 11. *Questioning*. Doctors may ask questions to learn more about the client, but intensive questioning, in fact, can disrupt the natural flow of communication, diverting it in ways that are more interesting to the doctor than to the patient.
- 12. *Adding humor, or changing the subject*. While using humour to shift the client's attention away from emotional or potentially dangerous issues might be beneficial. This diversion in conversation sends the signal that patient's words are irrelevant.

When expressing empathy, ethnic and cultural variations must be taken into account because it affects how you and your patient interpret spoken and nonverbal signals.

## 2. Developing Discrepancy

Clients are more motivated to change when they see gaps between their present state and their future expectations. As a clinician, your aim should be to make the patient realize the difference between his present conduct from his ideal conduct. Discrepancy must be highlighted through making the patient aware of the negative impacts which his present behavior can cause. Although assisting a patient in perceiving inconsistencies may not be easy, but deliberate pondering may help to highlight inconsistencies.

Separating behaviour from patient, & assisting your client in determining how his current behavior is jeopardising critical personal goals (e.g., good health, financially success etc.). This necessitates paying close attention to your patient's assertions about his or her values & ties to the family, social and religious. If patient expresses concern about consequences of personal behaviour, emphasise this concern to increase patient's awareness of the discrepancy.

The "Columbo method" is an effective technique for assisting a client in perceiving inconsistency. This method is very beneficial when working with a patient who gives preference to be in charge. In essence, the doctor shows that he or she understands the client's

difficulties and is always seeking clarity, but he or she appears unable to find a solution. Uncertainty and misunderstanding may encourage the patient to take charge of situation with offering the physician a solution.

Other than talking, there are tools that can be used to uncover discrepancies. Showing a movie and then discussing it with the client, for example, allows the client to connect it to his own circumstance. It can also be helpful to mix and match different social messages or visuals which are significant to a patient. Because it stimulates discussion and reaction, this method may be especially helpful for teens.

You can assist your client in perceiving difference on different levels, from physical to social, from financial to spiritual, and across several domains, such as attitude and behavioural. To accomplish this, it is very important in knowing the different values in the eyes of the person and the society. Substance abuse, for example, may be incompatible with the patient's own values, it may be incompatible with values of the wider community, it may be incompatible with spiritual convictions, or it may be incompatible with the patient's family members' values. By different substance-using behaviour with the emphasis clients place on their ties with social, family and religious groups, the disparity can be shown.

### 3. Avoid Argument

If the client is aggressive, rebellious, or provocative, you may be tempted to dispute with him or her if he or she is unsure about or unwilling to change. Trying to persuade a customer that there is a problem or that change is required, on the other hand, may result in more resistance. Trying to persuade patient to agree with you, the patient will almost always disagree. Arguments with clients can quickly devolve into a power struggle, which does not inspire positive change. Progress may be made when the customer, not you, is the one who makes the case for change. It is preferable to "walk" with patients (i.e., accompany them through healing) rather than "drag" them along (i.e., direct their healing).

## 4. Roll With Resistance

Resistance is a genuine cause for concern among clinicians since it predicts negative outcomes of the treatment and a lack of participation in treatment process. Two interpretations of resistance are there; first that patient is defiant, second perspective shows resistance is an indication that patient has a different perspective on the situation. This necessitates first understanding your patient's viewpoint and then starts your proceeding.

Resistance is a cue either to shift course or pay closer attention. Resistance, on the other hand, provides you with opportunity to reply in novel, possibly surprise way & to taking advantage of situation without getting aggressive. Adapting to resist is like avoiding argument in that, it provides an additional opportunity to exhibit empathy by becoming nonjudgmental and respectful, motivating patient for talking & stay involved. When feasible, avoid provoking resistance and diverting or deflecting the energy patient is expending.

## 5. Support Self-Efficacy

Many patients lack self-efficacy, making it challenging for them to feel they can start or continue behavioural change. Improve self-efficacy necessitates generating & sustaining hope, optimism, & belief in the possibility of change. It necessitates recognising the client's strengths and emphasising them wherever possible. Perceived difference between desire for change & emotions of pessimism about achieving change is probable to result in rationalisations or denial to avoid distress unless a client feels change is achievable. Because self-efficacy is so important in behaviour change, it's necessary that you believe in your customers' ability to achieve their goals as well.

Clients' self-efficacy can be improved through education. Clients can better comprehend how substance misuse or dependency develops when they have access to reliable, comprehensible, and accurate information. A seemingly hopeless and overwhelming process can be broken down into manageable incremental steps toward healing.

### **Motivational Interviewing and Managed care**

In addition to its effectiveness, "motivational interviewing" has the advantage of being simple to implement in a managed care context, where cost cutting is a major issue. In the following aspects, "motivational interviewing methodologies" are suited to managed care:

- **1. Low cost**. Motivational interviewing was created to be a brief intervention from the beginning, and it is often provided in 2-4 outpatient sessions.
- **2. Efficacy**. A lot of evidence are there to suggest that "Motivational interviewing" causes people to change their risky lifestyle habits.
- **3. Effectiveness.** The large effects of brief motivational therapy have been replicated in a wide range of therapeutic contexts.

- **4. Mobilizing patient resources**. "Motivational interviewing" focuses on patient's own resources for change mobilisation.
- **5.** Compatible with health care system. "Motivational interviewing" doesn't imply long-term relationship between patient and the therapist. "Motivational interviewing" can be administered within framework of broader health care system systems, and only one session has been demonstrated to induce behaviour change.
- **6. Emphasising patient motivation**. Because patient motivation is a key forecaster of change, this strategy focuses on establishing client motivation for change first. So patients have been given a thing which will give them results within few sessions, even they are not interested to continue the longer therapy, as is typically seen in substance dependence cases.
- 7. Enhance adherence. "Motivational interviewing" is good way to start additional health-care interventions because the same has already been demonstrated to enhance adherence, leading to better treatment results.

#### 4. GENERIC COUNSELLING

### What is counselling?

Counselling has been defined as "a systematic process which gives individuals an opportunity to explore, discover and clarify ways of living more resourcefully, with a greater sense of well-being. Counselling may be concerned with addressing and resolving specific problems, making decisions, coping with crises, working through conflict, or improving relationships with others."

A wide range of health professionals, including GPs and community psychiatric nurses, provide counselling in primary care. Counseling has become increasingly important in order to increase the patient's well-being. Effective counselling should help young people enhance their self-esteem and achieve their goals in life. Counseling should enable patients to fully engage and getting benefit from the nation's economic and social progress.

### Forms of Counselling;

Counsel was delivered in traditional civilisations in a variety of ways, the two most prevalent were giving advice & imparting wisdom.

### 1. Giving Advice

Giving counsel has long been a popular approach to help others. The advice given was frequently beneficial in aiding people in considering their future lives. In many cases, patients' "extended family" was their primary source of advice. There was never a shortage of those wanting to impart their knowledge. Giving advise frequently increased the young person's reliance on the advice given. It was mostly subjective in most circumstances and did not help young people's personal growth.

## Activity to give advice;

Identify conditions in clinic where direct advises can be given.

## **Group Work:**

- 1. One person will enact a patient with some problem; another should enact as counsellor trying to lend a helping hand without giving advice.
- 2. Held a group discussion after the role play.
  - a) How successful was the counsellor in deflecting advice?
  - b) What strategies/ tactics did counsel or employ to evade delivering advice?
  - b) How counselor could have been more effective providing assistance to person having problem?

#### 2 WISDOM;

Wisdom is defined as the ability to use one's life experience and knowledge wisely. Elders in Indian civilizations were thought to have a responsibility to impart knowledge or guidance to those in need. Wisdom of elderly persons was part of family's or society's counselling function for the sufferers.

Sharing proverbs or folk tales is another part of wisdom.

## **Activity 2: Wisdom**

- 1. Consider a piece of advice you received from a family elder that was beneficial to you.
- 2. Think of a proverb in your own tongue. To the best of your ability, translate it into English.

3. Divide into four groups of four persons and discuss your experiences with one another.

## **Definition of counseling;**

Single definition of counseling is not there, as definition of counselling depends upon theoretical orientation. This is due to the fact that theoretical orientation influences how counselling is defined.

Counseling is "learning-oriented process" that takes place in some interactive relationship having goal of assisting a person in learning more about themselves & applying that knowledge to become a more effective member of society. Counseling is a procedure in which a helper displays concern and care for a person who is having a difficulty, and encourages that person's own growth & change by self-awareness.

Counseling is sort of relationship in between person who is concerned, and someone who has a need. This is usually a one-on-one relationship, though it can occasionally involve more than two persons. It is intended to assist people in better understanding and clarifying their viewpoints, as well as learning how to reach their goals by making meaningful & well-informed decisions, and resolving emotional or interpersonal issues.

Counseling can be defined in a variety of ways, as these definitions demonstrated. Counseling comes in a variety of shapes and sizes. A teacher can be used by a student as a safe person with whom to express worries. In this case, the teacher employs counselling techniques without engaging in a formal 'counselling relationship'. This teacher offers advice, without being a counsellor.

### Aims of Counseling;

Counseling has a wide range of goals. They could be affected by the scenario, the surroundings, and training. The following are the basic goals of counselling:

- 1. To assist patients in gaining a better understanding of the causes and progression of emotional problems, resulting in a greater ability to exercise logical control on their feelings & actions.
- 2 To change maladaptive behavior.
- 3. Assisting patients in realising their full potential or reconciling competing aspects of their personalities.

4. To equip patients with the skills, awareness, and information necessary to deal with social inadequacies.

Withdrawal, sadness, aggravation, rage, failure to meet demands, lacking information, partially or totally failure, not able to actualize aspiration, anxiety, and hyperactivities, are some of the difficulties and problems that people from many walks of life face in society.

## **Different Fields of Counseling;**

### 1. Educational Counseling

Educational counselling is a term firstly used by Truman Kelley in 1914. It is process providing services to students requiring help in making important educational decisions, such as course and study selection, interest and ability decisions, and school &college selections. "Educational counselling" broadens a student's understanding of different available options in the field of educational.

## 2. Personal Counseling

Personal counselling addresses emotional anguish &behavioral issues that happen when people are unable to cope with tasks & developmental stages. Any facet of development may become adjustment problem, and it's unavoidable that everybody will face extraordinary difficulties in facing an ordinary obstacle at some point. For example:

- Feeling anxious over career decision
- Persistent anger on some interpersonal-problem
- · Insecurity for getting aged
- Feeling depressed with boring work
- Feeling of remorse for a blunder mistake
- Lack of assertiveness & confidence
- Feeling sad for losing a beloved one
- Feeling aloneness after self or parents' divorce

### 3. Vocational Counseling

Vocational counselling is defined as "Individual contacts with those counselled, in order to facilitate career development." This definition & category include counselling-situations such as:

- Assisting patients in becoming aware of the various jobs available to them
- Interpreting a "occupational interest inventory" for some student
- Assisting teenager in deciding their vocation after school/college
- Assisting a patient with an application to a college or university
- Preparing for a real job interview by role-playing one.

### **Stages of the Helping Model;**

Three stages are there of helping model.

#### 1. The Present Scenario

## a) Help patients to tell their stories

Patients share and discuss their concerns and missed opportunities while presenting the storey. Some patients are vocal, while others are silent. Some people will be hesitant to share all that is bothering them, while others will do so without hesitation. Either in beginning of assisting process, or in "bits and pieces", the story must be told. In order for this to happen, general practitioners must establish a positive and beneficial relationship with their patients. Rather than passing judgement on their patients, they must assess them. They must consider the type and severity of the problem, as well as any unrecognised issues, the impact of the patient's surroundings on problems, and the patient's personal and interpersonal resources.

**b**) Assist patients in recognising and overcoming blind spots, as well as developing new views on themselves &their problems.

Many people are unable to solve problems, or take advantage of opportunities as they are unable to perceive themselves from new viewpoints. They get stuck in self-defeating thought and behaviour pattern. One method that counsellors can empower patients is to use imagination and brainstorming to solve problems and build opportunities. It's not the same as telling someone that what they're doing is bad when you challenge their blind spots. It is

assisting them in developing a more creative perspective of themselves, others, and the world around them.

### c) Helping patients in searching leverage.

Patients must be assisted in identifying & addressing issues, concerns, or opportunities that are important to them. Leverage is made up of three different activities.

First, the problem's cost must be calculated in terms of the time and effort required to solve it. Second, if patients reveal multiple problems simultaneously when narrating stories, or if problems are complex, criteria is needed to decide which problem should be addressed first. Finally, different issues, problems, &concerns must be defined in specific experience, behaviours, feelings & emotions.

#### 2. Preferred Scenario

a) Assist patients in developing range of future options.

If a patient's current situation is difficult &unpleasant, patient will require assistance in imagining, conceptualising, or seeing a future situation which is more acceptable. Following questions to yourself must be asked:

"How would this problem appear if I handled it better?"

"What modifications in my current way of life would be beneficial?"

"How would it appear if it was better?"

Patients must be assisted in locating suitable and realistic models. Another option is to reflect on happier times or engage in new activities. Many patients have found that writing fantasy and guided imagery are therapeutic.

## b) Help patients to translate possibility into viable agenda.

The conceivable desired outcomes of aiding process are made up of a wide range of possibilities. The customer is assisted in selecting the most viable options and converting them into an agenda, or a list of tasks to be completed.

c) Assist patients in identifying the types of incentives that motivate them to stick to the plans they make.

Agendas that a patient selects should be tempting. If not, it's time to figure out how to get people to commit. The agenda's aims must be accepted by the client and appeal to him or her. It is preferable if they are chosen from a variety of possibilities. The emphasis should be on those that help to alleviate crises or discomfort.

Goals that are difficult to achieve should not be avoided. The counsellor can assist patients in identifying strategies for overcoming roadblocks to goal achievement. Contracts can assist patients in making decisions, and the client should be assisted in identifying strategies for achieving their objectives.

### 3. Strategies (Getting There)

a) Assist patients in brainstorming various tactics for carrying out their plans. Patients are encouraged to think about things like, "How can I get where I want to go?" When a strategy is picked from a variety of options, it is more likely to be successful.

A strategy is a plan of action for achieving a goal. If the plan is complicated, it should be broken down into several interconnected results or accomplishments. The tactics for each of these sub-goals are then determined. This "divide-and-conquer strategy" can lead to accomplishment of previously unattainable goals. One of the reasons why many personsfail achieving their goals is that they never consider all options available to them. Suspending judgment, developing multiple ideas, using one concept to lead to other, removing limits to thinking& producing new ideas, all play a role in brainstorming.

b) Assist patients in selecting a set of techniques that are most appropriate for their circumstances and resources.

The term 'best' refers to one plan, or a set of strategies, that best meets the patients' needs, preferences, and resources, and is least likely to be thwarted by the client's environment. They must be clear and detailed, related to the desired aim, realistic, successful, and acceptable to the customer, as well as consistent with his or her values.

c) Assist patients in developing a strategy, a step wise approach for achieving goals.

A plan outlines techniques for achieving objectives, breaks them down into manageable chunks, organises the chunks, and creates a timeline. Making plans enables patients to discover more effective ways to achieve their objectives, i.e., better tactics. Plans allow you to assess the realism and adequacy of your objectives. They provide information to patients

about their techniques. Help being extended to the patients to discover barriers in reaching of goals.

#### **Summary:**

Since the dawn of time, people have aided one another. Maximum this type of assistance has come in form of guidance & wisdom. In general, medical counselling assists patients in learning to deal with challenges they face on a regular basis. Counseling strives to provide patients with the opportunity to explore, find, and clarify more gratifying and resourceful ways of living. The majority of people's issues are social and personal in nature. Men and women, boys and girls, seek guidance in this area.

#### **CASE VIGNETTE 1**

**History**: Mr. S., a 25-year-old young man with 8 months of behavioural concerns, was brought to the emergency room by family &neighbors. He became withdrawn at first, locking himself away in his room. He was frequently caught staring vacantly into sky, smiling aimlessly, speaking all alone as though talking with someone. He disregarded his personal hygiene & meals, refusing to meet everyone. He had reported hearing some voices of neighbors making a conspiracy of killing him after being evaluated. He was not eating because of certainty that entire family was attempting to kill him with poisonous food. He was denying that it was a kind of disease.

**Findings**: Patient exhibited "auditory hallucinations" when examined. He was diagnosed with "psychosis" and antipsychotic medications were started.

#### **CASE VIGNETTE 2:**

Mrs. T, a 30-year-old housewife, appeared with a headache that manifested as weight in her head entire day. She had previously visited a nearby general practitioner and been diagnosed with 'hypothyroidism', and treatment started for same, but her headache continued. The results of the other investigations were normal. The patient was crying during the interview.

When asked why she was crying, the patient stated that she was no longer happy. This occurred six months after she had lost her job. She stated that she is not cheerful, even if something positive has occurred. The world no longer piqued her curiosity, and she had lost interest in her previous pastimes. Housework seemed to be a strain lately, and she struggled to keep up, and she was slower than usual in her daily activities.

She stopped going to her friends' houses and had regular quarrels with her husband, who thought she wasn't as interested in the house as she used to be.

She believed she would never be able to improve and that she was now a trouble for her family. She started blaming herself for same thing. When probed deeply, she admitted of having a thought about committing suicide once but never made any attempt. She was also unable to sleep for more than two hours at a time at night and felt tired during the day. She appeared to have lost weight in the last three months, according to her husband.

### **Explaining the vignette;**

Somatic problems, such headaches, might be a depressive counterpart and should always be investigated. The loss of a job, which is a psychosocial stressor, triggered the patient's episode. Suicidal ideation could be missed if not proactively inquired about. This case exhibits depression's signs & symptoms, as well as depressed thoughts of worthlessness and hopelessness.

#### **CASE VIGNETTE 3**

Since last year, a young teenage girl has complained that her "mind is always on the go." She is concerned about everything under the sun, from simple tasks such as doing her schoolwork to more serious matters such as exam preparation. She continually anticipated things, and continued to think about them throughout the day, which took up a lot of her time, but she couldn't stop. She was having problems sleeping late as a result of this. She used to experience palpitations, chest tightness, and the feeling that her body was constantly tense and her head was heavy with anxieties. She struggled to relax, which resulted in regular anger toward family members, and her grades suffered as a result of her inability to concentrate on her studies. All of this made her miserable and despairing.

#### **Explaining the vignette;**

So as per this vignette, GAD is characterized by major worries and apprehensions, physical anxiety such as muscle tension, cognitive symptom such as increased shock & surprise. Symptom of depression should be investigated. Differentials are the same in panic disorder as they are in anxiety disorder.

# CHAPTER 4

## Results

## **CHAPTER 4**

#### 4.1 Results:

The objectives of this study are to investigate the effectiveness of 'Brief Psychological Intervention' in identifying and managing three most common mental health problems—Anxiety, Depression & Somatic Symptom Disorder—at General Practice level along with investigating relationship among them. Main cause of this research was to check the effectiveness of the intervention. Paired t Test conducted to find out pre & post intervention differences. Results of study were analyzed, tabulated and discussed below.

As per the methodology adopted, Socio-demographic characteristics of studied subjects (N = 3000) along with scoring of their "12-Item General Health Questionnaire (GHQ-12) (Goldberg & Williams, 1988)" was conducted. It helped the researcher to see the difference between identification of psychological and non-psychological subjects by general practitioners (GPs) and investigator.

Out of the 3340 patients approached, 3000 gave their consent for this study (89.8%). Out of these, 1405 (46.8%) were males and remaining 1595(53.2%) were females. After analyzing the data as per qualification of the examined 3000 patients, it was observed that females visited general practitioners (GPs) slightly more than males. 1595 (53.2%) females visited GPs to seek consultations as compared to 1405 males (46.8%) in this study. If we analyse the data as per the marital status of the patients, it was observed that married patients visited general practitioners far more the unmarried ones. 2551 (85%) married patients visited the general practitioners as compared to 449 (15%) unmarried patients.

Table 1. Socio-demographic characteristics of studied subjects (N = 3000)

Variables	N	n %	
Gender			
Male	1405	46.8 %	
Female	1595	53.2%	
Marital status			
Married	2551	85%	
Un-married	449	15%	
Level of education			
Up to metric	906	30.2%	
Undergraduate	1248	41.6%	
Graduate	694	23.1%	
Post graduate	152	5.1%	
Locality			
Urban	2605	86.85%	
Rural	395	13.2%	
<b>Economic status</b>			
Lower middle class	637	21.2%	
Middle class	2017	67.2%	
Upper class	346	11.6%	
<b>Employment</b>			
Unemployed	183	6.1%	
Self-employed	566	18.9%	
Govt. job	102	3.4%	
Private job	862	28.7%	
House wife	1072	35.7%	
Student	126	4.2%	
Retired	89	3.0%	

When the data was also assessed as per the employment status of the patients, it was seen that only 183 (6.1%) patients were unemployed and 566 (18.9%) were self employed. The patients having govt. jobs were only 102 (3.4%) whereas 862 (28.7%) patients were working in different private jobs. Majority of the patients visiting GPs were house wives having percentage of 35.7 (1072). There were also 126 (4.2%) students and 89 (3.0%) retired persons who visited the GPs to seek their opinion for their different medical issues.

Keeping in view the academic background of the visited patients, it was observed that undergraduates were the most who visited general practitioners, as compared to graduates, post graduates or even those who have qualification even up to matriculation only. As per their qualification, 1248 (41.6%) patients were undergraduates, followed by 906 (30.2%) patients who were having qualification merely up to matriculation only. At third position, it was the graduates, 694 (23.1%) in number, who were having anxiety. The least numbers were of those patients, who had done post graduation, and their number was only 152 (5.1%), out of 3000 patients.

Out of 3000 patients visited GPs, majority of them belonged to urban area. Total 2605 (86.85%) patients were hailing from urban setup whereas only 395 (13.2%) were from rural area. As per the economic status of the patients, 637 (21.2%) were from lower middle class, 2017 (67.2%) from middle class whereas only 346 (11.6%) were from upper class.

Table 2: Prevalence of non-psychological and psychological patients (N=3000)

N	GHQ-12* Score less than 4	GHQ-12* Score 4 onwards
3000	1453	1547

<sup>\* &</sup>quot;The 12-Item General Health Questionnaire (GHQ-12) (Goldberg & Williams, 1988)"

Out of 3000 patients examined, 1547 patients (51.56%) were identified as probable cases, having GHQ score of 4 onwards. 44.41% males (624 out of 1405) and 57.86% females (923 out of 1595) were found out to be GHQ positive cases, indicating that they have some psychological problem.

Table 3: Gender GHQ-12 Cross tabulation

	GHQ-12* Score		
GENDER	0-4 (Negative)	4 onwards (Positive)	TOTAL
MALE	781	624	1405
FEMALE	672	923	1595
TOTAL	1453	1547	3000

<sup>\* &</sup>quot;The 12-Item General Health Questionnaire (GHQ-12) (Goldberg & Williams, 1988)"

Cross tabulation from table 3 reveals that from the 1453 non-psychological patients visiting general practitioners, 781 were male and 672 were female. Whereas among the 1547 identified psychological patients, 624 were male and 923 were female.

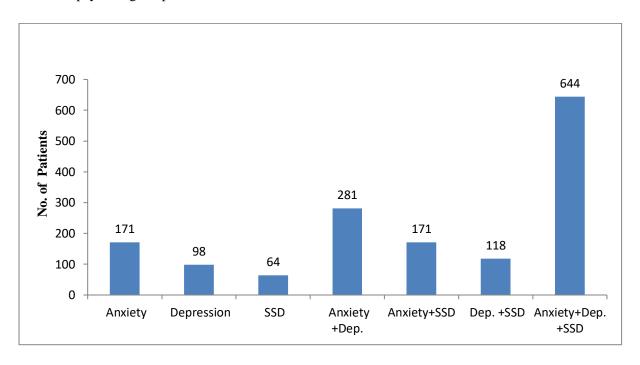


Figure 1 Prevalence of Anxiety, Depression & Somatic symptom disorder (N= 1547)

Variables	Frequency	Percent
Anxiety	1267	42.2
Depression	1141	38.03

997

Table 4: Prevalence of Anxiety, Depression and SSD

Somatic symptom disorder

Out of the 3000 patients examined from the fifteen different OPDs of general practitioners, 1267 patients turned up to be suffering from Anxiety, (171+281+171+644), which means 42.2% of the patients visited to the general practitioners were having anxiety. Total 1141 patients, out of the sample of 3000 patients, were having depression, indicating that 38.03%

33.23

of the visited patients were having depression at the general practice level. Out of the 3000 patients examined in the OPDs of general practitioners, 997 patients turned up to be suffering from Somatic symptom disorder, which means 33.23% of the patients visited to the general practitioners, were having Somatic symptom disorder.

Table 5: Socio-demographic characteristics of studied subjects as per their psychological disorders (n = 3000)

Variables	Anxiety	Depression	SSD
	Yes	Yes	Yes
	n=1267n (%)	n= 1141n (%)	n= 997n (%)
Gender			
Male	508 (40.1)	440 (38.56)	373 (37.41%)
Female	759 (59.9)	701 (61.44)	624 (62.59%)
Marital status			
Married	1112(88.3)	989(86.68%)	882 (88.46%)
Un-married	155 (11.7)	152 (13.32%)	115 (11.53%)
Level of education			
Up to metric	420 (33.14)	377(33.04%)	350 (35.10%)
Undergraduate	516 (40.75)	478(41.89%)	402 (40.32%)
Graduate	272 (21.46)	234(20.42%)	198 (19.85%)
Post graduate	59 (4.65)	52(4.65%),	47 (4.73%)
Locality			
Urban	1101(86.9)	978 (85.71%)	861 (86.35%)
Rural	166 (13.1)	163(14.29%)	136 (13.65%)
Economic status			
Lower middle clas	s 289 (22.80)	279(24.45%)	229 (22.96%)
Middle class	840 (66.31)	737(64.60%).	669 (67.10%)
Upper class	138 (10.89)	125 (10.95%)	99 (9.94%)
Employment			
Unemployed	88 (6.95)	81 (7.09%)	71 (7.12%)
Self-employed	211 (16.65)	178(15.60%).	154 (15.44%).
Govt. job	32 (2.52)	22 (1.92%)	23 (2.3%)
Private job	352 (27.79)	323 (28.30%)	258 (25.87%)
House wife	521(41.12)	473(41.45%)	434 (43.53%)
Student	35 (2.76)	41(3.59%)	26 (2.6%)
Retired	28 (2.21)	23 (2.03%)	31 (3.1%)

P < 0.05 in anxiety, depression and somatic symptom disorder.

From the 1267 patients identified for anxiety, 508 (40.1%) patients were male, and 759 (59.9%) were female. If we look at the collected data in terms of marital status, it was found that 1112 (88.3%) were married and remaining 155 (11.7%) patients were unmarried.

Out of these 1267 patients, 1101 (86.9%) were living in urban areas where as 166 (13.1%) patients were living in rural areas. After analyzing the data as per qualification of the 1267 patients having anxiety, it was observed that under-graduates suffer anxiety the most, as compared to graduates, post graduates or even those who have qualification even up to matriculation only. 516 (40.75%) patients out of 1267, who were having anxiety, were undergraduates, followed by 420 (33.14%) patients who were having qualification merely up to matriculation only. At third position, it was the graduates, 272 (21.46%) in number, who were having anxiety. The least numbers were of those patients, who had done post graduation, and their number was only 59 (4.65%), out of 1267 patients.

In terms of financial status of the patients suffering from anxiety, it was revealed from the collected data that it was the middle class who suffered the most, followed by lower middle class and upper class respectively. Out of the total 1267 anxiety patients, there was 289 (22.80%) lower middle class patients (having income up to ten thousand rupee only), who were having anxiety. The number of middle class patients (having income from ten thousand to thirty thousand rupee only) having anxiety was 840 (66.31%). Only 138 (10.89%) patients out of the 1267 patients were those who belonged to upper class (having income more than thirty thousand rupee).

As per the employment and classification of the patients having anxiety, it was observed from the collected data that it was the house wives who had anxiety the most. Out of the 1267 anxious patients, the frequency of unemployed is 88 (6.95%) and self employed is 211 (16.65%). Patients having government jobs were only 32 (2.52%) whereas 352 (27.79%) patients were those who were having private jobs, clearly indicating that the patients in private jobs carries more anxiety than those having secure government jobs. The number of house wives came out to be 521(41.12%), which was the maximum numbers from the collected data. 35 (2.76%) students and 28 (2.21%) retired patients were also there in the observed data out of 1267 patients having anxiety.

Depression was the second variable of this study and 1141 patients of the same were identified, and among them 440 (38.56%) patients were male, and 701(61.44%) were female. It was also observed from the collected data that 989 (86.68%) were married and the rest 152 (13.32%) patients were unmarried.

The table no. 4.6 also shows that, among the 1141 identified depressed patients, 978(85.71%) were living in urban areas and 163 (14.29%) in rural areas. As per qualification of the 1141 patients of depression, it was also observed that under-graduates suffer depression the most, as compared to graduates, post graduates or even matriculate patients. 478 (41.89%) patients were undergraduates, 234 (20.42%) patients were graduates and 377(33.04%) patients had studied up to were matriculation only. Only 52 (4.65%) had done post graduation.

The economic status of the patients having depression revealed that the middle class who suffered the most, followed by lower middle class and upper class respectively. There was 279 (24.45%) lower middle class patients (having income up to ten thousand rupee only), who were having depression. The number of middle class patients (having income from ten thousand to thirty thousand rupee only) having depression was 737 (64.60%). Only 125 (10.95%) patients were those who belonged to upper class (having income more than thirty thousand rupee).

As per the employment and classification of the patients having depression, it was observed from the collected data that house wives suffered depression the most. Among1141 depressive patients, the frequency of unemployed are 81(7.09%) and self employed is 178 (15.60%). Patients having government jobs were only 22(1.92%) whereas 323 (28.30%) patients were those who were having private jobs. The number of house wives came out to be 473 (41.45%), which was the maximum numbers from the collected data. 41(3.59%) students and 23(2.03%) retired patients were also there in the observed data out of 1141 patients having depression.

Somatic symptom disorder was the third variable, 997 patients of the same were identified, and among them, 373 (37.41%) patients were male, and 624 (62.59%)were female.882 (88.46%) patients of SSD were married and remaining 115(11.53%) were unmarried. Among the 997 identified patients of somatic symptom disorder, 861(86.35%) were living in urban areas and 132(13.29%) in rural areas. After analyzing the data as per qualification of

these patients, it was observed that 402 (40.48%) patients were undergraduates, followed by 350(35.24%) having qualification merely up to matriculation only. At third position, it was the graduates, 198(19.93%) in number, who were having somatic symptom disorder. The minimum numbers were of those patients, who had done post graduation, only 47 (4.73%) patients. It was revealed from the collected data that there were 229 (22.96%) patients who belonged to lower middle class (having income up to ten thousand rupee only). The number of middle class patients (having income from ten thousand to thirty thousand rupee only) having SSD was 669 (66.9%). Only 99(9.99%) patients out of the 997 patients were those who belonged to upper class (having income more than thirty thousand rupee).

As per the employment and classification of the patients having somatic symptom disorder, it was observed that the frequency of unemployed and employed patients having DDS is 71(7.12%) and 154 (15.44%) respectively. Patients having government jobs were only 23(2.3%) whereas 258 (25.87%) patients were those who were having private jobs, indicating that the patients in private jobs carries more somatic symptom disorder than those having secure government jobs. The number of house wives came out to be 434 (43.53%), which was the maximum numbers from the collected data. 26(2.6%) students and 31 (3.1%) retired patients were also there in the observed data out of 997 patients having somatic symptom disorder.

The finding of the collected data shows that married patients and the patients belonging to urban area are shown to have maximum common mental health problems. This observation is due to the fact that mean age of patients falling in this study is 42.3 years (of marriageable age), and maximum general practitioners and the patients belong to urban setup.

#### 3.1.2 HYPOTHESES

1 The Brief Psychological Intervention will show significant difference between control & experimental group in identifying three most common mental health problems—Anxiety, Depression & Somatic Symptom Disorder at General Practice level.

Table 6: GPs and Investigator's pre and post test sensitivity in term of numbers in Identifying common mental health Problems in control and experimental groups

Identification of patients having common mental health problems	Control Group N=750		Experiment N=750	ntal Group
	Pretest	Posttest	Pretest	Posttest
By G P	173	169	223	305
By Investigator	367	384	460	336

Table 6enunciates that significant change in sensitivity noticed in experimental group in identifying psychological problems in patients visiting general practitioners, whereas no significant change in sensitivity noticed in control group in identifying psychological problems in patients visiting general practitioners.

In control group pretest the pretest of control group, total patients identified by investigator having psychological problems were 367, but the general practitioners could identify only 173 patients. Thus as per the pretest collected data, 173 true positive patients were identified by control group general practitioners, and 194 false negative cases were also detected. (367-173). Whereas in the control group posttest, total patients identified by investigator having psychological problems were 384, but the general practitioners could identify only 169patients. Thus as per the posttest collected data, 169 true positive patients were identified by control group general practitioners, and 215 false negative cases were also detected.

In the pretest of **experimental group**, total patients identified by investigator having psychological problems were 460, but the general practitioners could identify only 223 patients. Thus as per the pretest collected data, 223 true positive patients were identified by experimental group general practitioners, and 237 false negative cases were also detected. Whereas in the post test experimental group, total patients identified by investigator having psychological problems were 336, and the general practitioners could manage to identify305 patients. Thus as per the posttest collected data of experimental group, 305 true positive patients were identified by general practitioners, and only 31 false negative cases reported.

Table 7: GP's pre and post test sensitivity in term of percentage in Identifying common mental health Problems in control and experimental groups

	Control G	Group N=750	Experimental GroupN=75		
GP's Sensitivity in Identifying	Pre-test	Post-test	Pre-test	Post-test	
common mental health Problems	47.1%	44%	48.4%	90.7%	

Table 7 illustrates the sensitivity (in percentage) of general practitioners in identifying three most common mental health problems—anxiety, depression & somatic symptom disorder of control and experimental group, before and after the intervention.

In control group, sensitivity of general practitioners in pre test control group in identifying common mental health was 47.1%, whereas the sensitivity of general practitioners in post test control group in identifying common mental health was 44%.

In experimental group, significant change in sensitivity noticed in identifying psychological problems in patients visiting general practitioners. The sensitivity of experimental group general practitioners in identifying common mental health problems in pretest was 48.4%. This identification sensitivity improved to 90.7% in posttest, indicating a great improvement in posttest experimental group, as compared to pretest of the same group.

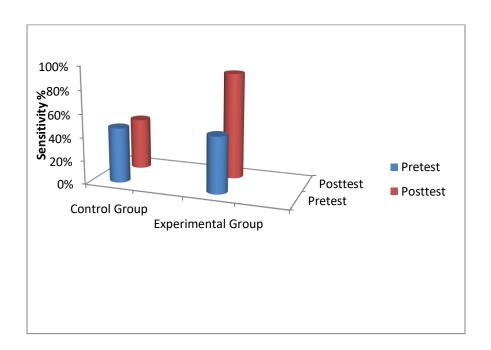


Figure 2: Control group and experimental group, before and after intervention, with regard to general practitioners ssensitivity in identifying common mental health problems

The above mentioned data findings clearly show the significant increased level of identification of common mental health problems in experimental group as compared to control group, pre and post intervention.

Table 9 illustrates that in control pretest, total patients identified by investigator having anxiety, depression and somatic symptom disorder were 157, 137 and 73 respectively, but the general practitioners could identify only 60, 57 and 0 patients. Whereas in the post test of control group, total patients identified by investigator having anxiety, depression and somatic symptom disorder were 145, 114 and 125 respectively, but the general practitioners could manage to identify only 48, 42 and 0 patients.

Table 8: GPs and Investigator's pre and post test specific sensitivity in identifying anxiety, depression and somatic system disorder in control and experimental groups (n=750)

Specific identification sensitivity of GPs	Control N=7	_	Experimental Group N=750	
	Pretest	Posttest	Pretest	Posttest
Anxiety identification by GP	60	48	73	127
Anxiety identification by Investigator	157	145	187	138
Depression identification by GP	57	42	61	105
Depression identification by Investigator	137	114	148	114
S. S.D. identification by GP	0	0	11	73
S. S.D. identification by Investigator	73	125	125	84

In experimental pretest, total patients identified by investigator having anxiety, depression and somatic symptom disorder were 187, 148 and 125 respectively, but the general practitioners were able to identify only 73, 61 and 11 patients. Whereas in the post test of control group, total patients identified by investigator having anxiety, depression and somatic symptom disorder were 138, 114 and 84 respectively, but here after getting the intervention, general practitioners could manage to identify 127, 105 and 73 patients, showing a significant improvement in identifying anxiety, depression and somatic symptom disorder.

Table 9: GP's pre and post test sensitivity in term of percentage in Identifying Anxiety, Depression and Somatic Symptom Disorder (SSD) in control and experimental groups

GP's Sensitivity in Identifying	Control Group N=750		Experimental Group N=750		
	Pre-test	Post-test	Pre-test	Post-test	
Anxiety	38.21%	33.1%	39.03%	92.02%	
Depression	41.6%	36.8%	41.2%	92.10%	
Somatic symptom disorder	0%	0%	8.8%	86.9%	

Table 9 illustrates the increased identification level of all the three variables individually. In control group, sensitivity of general practitioners in pre test control group in identifying anxiety, depression and somatic symptom disorder was 38.21%, 41.6% and 0% respectively. But the sensitivity of general practitioners in post test control group in identifying anxiety, depression and somatic symptom disorder was 33.1%, 36.8% and 0% respectively.

In experimental group, sensitivity of general practitioners in pre test control group in identifying anxiety, depression and somatic symptom disorder was 39.03%, 41.2% and 8.8% respectively. This shows that the sensitivity of general practitioners in post test experimental group in identifying anxiety, depression and somatic symptom disorder was improved significantly to 92.02%, 92.10% and 86.9% respectively. The poor recognition of SSD by general practitioners was due to the fact that general practitioners were not aware of the term Somatic Symptom Disorder (SSD) as this term was included in DSM V only. Earlier it was known as Somatoform disorder or psychosomatic symptom disorder.

Thus, the hypothesis H1 which states, "The brief psychological intervention will show significant difference between control and experimental group in identifying three most common mental health problems—anxiety, depression and somatic symptom disorder at general practice level" is accepted here.

**Hypothesis 2.1:** There exist no significant difference between control and experimental group before intervention with regard to Anxiety, Depression & Somatic Symptom Disorder among patients at General Practice level.

Table 10: Mean Scores of Control Group and Experimental Group Before Intervention with regard to Anxiety, Depression & Somatic Symptom Disorder(N = 75 patients)

		N	Mean	Std. Deviation	Mean Difference	t	Sig.(2-tailed)
GAD 7 Score (Anxiety)	Control	75	11.3333	4.41537	0.77333	1.149	0.253
	Experimental	75	12.1067	3.80815			
PHQ 8 Score (Depression)	Control	75	12.6667	4.93836	0.72000	0.929	0.354
	Experimental	75	13.3867	4.54376			
GHQ 15 (Somatic Symptom	Control	75	10.7733	3.93039	0.86667	1.474	0.143
Disorder)	Experimental	75	11.6400	3.23678			

Table 10 shows mean score of control & experimental group pre intervention. The above table expresses that there exists no significant difference between control group & experimental group before brief psychological intervention. In Control group, before intervention, anxiety had mean score of 11.333 & in experimental group, anxiety having meanvalue of 12.1067 before intervention, indicating that there exists no significant difference among control & experimental group before intervention. In Control group, depression had mean value of 12.6667 before intervention & in experimental group, depression had mean score of 13.3867 before intervention, which indicated that before

intervention both the groups did not differ significantly. Same way, in control & experimental group, somatic symptom disorder with mean value of 10.7733 & 11.6400 had no major difference before brief psychological intervention. Thus conclusion can be drawn that both groups had no significant difference before brief psychological intervention introduced.

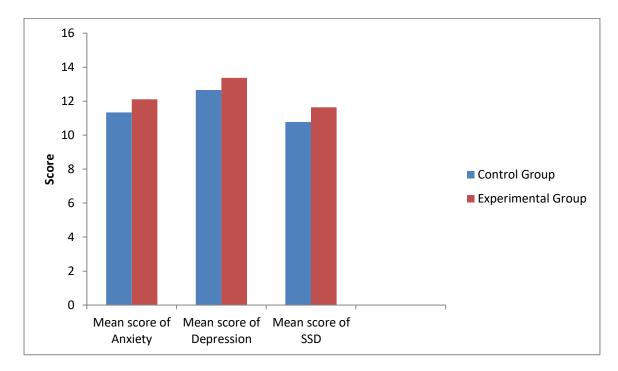


Figure 3: Mean Scores of Control Group & Experimental Group Before Intervention with regard to Anxiety, Depression & Somatic Symptom Disorder (N = 75 patients)

Thus, Hypothesis H1 which states that, "There exist no significant difference between control and experimental group before intervention with regard to Anxiety, Depression and Somatic Symptom Disorder among patients at General Practice level," is accepted.

Table 11: Mean scores of the Experimental Group before & after Intervention with regard to Anxiety, Depression & Somatic Symptom Disorder (N = 75 patients)

		N	Mean	Std. Deviation	Mean Difference	t	Sig.(2-tailed)
GAD 7 Score (Anxiety)	Before Intervention	75	12.1067	3.80815	5.12000	9.895	.0001
	After Intervention	75	6.9867	2.24507			
PHQ 8 Score	Before Intervention	75	13.3867	4.54376	5.32000	11.059	.0001
(Depression)	After Intervention	75	8.0667	2.46781			
GHQ 15 (Somatic	Before Intervention	75	11.6400	3.23678	4.46667	10.057	.0001
Symptom Disorder)	After Intervention	75	7.1733	2.35023			

Table 11 illustrates average scores of Anxiety, Depression & Somatic Symptom Disorder of experimental group before & after intervention. It also shows that there exists significant difference between pre & post intervention of experimental group at 5 per cent level of significance. Before intervention, the mean value of Anxiety in experimental group was 12.1067, which came down to 6.9867 after intervention. This reduction in the values indicates improvement, simply proving that anxiety of the subjects improved. Similar results were seen in Depression & somatic symptom disorder.

Before intervention, mean value of depression was 13.3867 with standard deviation 4.54376 & after intervention this values was at 8.0667 with standard deviation of 2.46781. Depression reduced significantly after intervention in experimental group at 5 per cent significant level. Mean score of Somatic symptom disorder before intervention was 11.6400, which was drastically reduced to 7.1733 after intervention, showing significant improvement. This result indicates that levels of anxiety, depression & somatic symptom disorder of experimental group before & after intervention are significantly different.

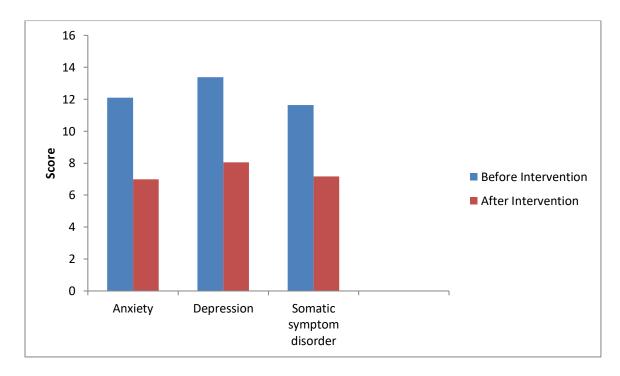


Figure 4: Mean score of Experimental Group before &after Intervention with regard to Anxiety, Depression& Somatic Symptom Disorder (N = 75 patients)

Thus, hypothesis H2 which states that, "There exist a significant difference between pre and post experimental group after intervention with regard to Anxiety, Depression and Somatic Symptom Disorder among patients at General Practice level," is accepted here.

Table 12: Mean score of the Experimental Group & Control group after Intervention with regard to Anxiety, Depression & Somatic Symptom Disorder (N = 75 patients)

		N	Mean	Std. Deviation	Mean Difference	t	Sig.(2-tailed)
GAD 7 Score(Anxiety)	Control	75	11.3733	3.46322	4.38667	9.205	.0001
	Experimental	75	6.9867	2.24507			
PHQ8 Score (Depression)	Control	75	11.5600	3.75334		6.735	.0001
	Experimental	75	8.0667	2.46781	3.49333		
GHQ 15 (Somatic Symptom	Control	75	9.8533	3.55913	2.68000	5.442	.0001
Disorder)	Experimental	75	7.1733	2.35023			

Table 12 illustrates the mean scores of Anxiety, Depression and Somatic Symptom Disorder of control and experimental group after intervention. This table shows that there is a significant difference between before & after intervention of the experimental group at 5 per cent level of significance. The mean of control group of anxiety after intervention was 11.3733whereas the mean score of anxiety in experimental group after intervention was 6.9867. It simply indicates that experimental group after the brief psychological intervention shows significantly improvement in the mean score of anxiety of the subjects. Similar results were witnessed in Depression and somatic symptom disorder. The mean of control group of

depression after intervention was 11.5600 whereas the mean score of depression in experimental group after intervention was 8.0667. The mean of control group of somatic symptom disorder after intervention was 9.8533, whereas the mean score of somatic symptom disorder in experimental group after intervention was 7.1733. The result shows that level of anxiety, depression & somatic symptom disorder of experimental group after intervention differ significantly from the corresponding mean scores of control group.

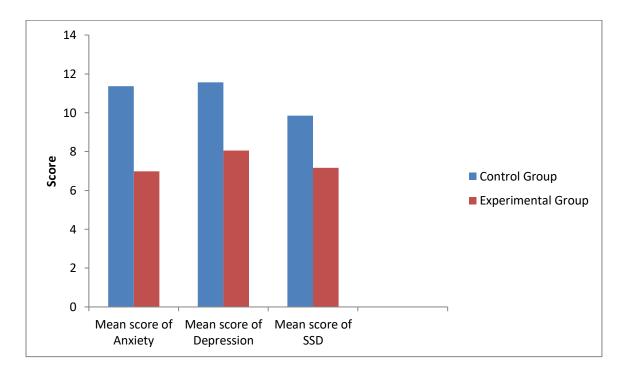


Figure 5: Mean score of Experimental Group & Control group after Intervention with regard to Anxiety, Depression & Somatic Symptom Disorder (N = 75 patients)

Thus, the hypothesis H2.3 which states that, "There exist a significant difference between experimental and control group after intervention with regard to Anxiety, Depression and Somatic Symptom Disorder among patients at General Practice level," is accepted here.

**Hypothesis 3.** There exists significant relationship among Anxiety, Depression and Somatic Symptom Disorder in patients visiting general physicians.

Out of 3000 patients examined, 1547 patients were identified as probable cases, having GHQ score of 4 onwards, indicating that they have some psychological problem. Out of the 1547 psychological patients, 613 patients i.e. 39.62% patients, were having anxiety. Depression was found in 512 patients i.e. in 33.09% of patients. SSD was having the minimum numbers as 422 patients i.e. 27.27% patients among the 1547 identified patients were having SSD. But a large number of patients are having more than one problem simultaneously. Out of the 1547 identified patients, 281 patients were having anxiety as well as depression. 171 patients were having SSD along with anxiety. Depression along with SSD was also seen in 118 patients. But a major chunk of patients, 644 patients, were having all the three mental health problems—anxiety, depression and somatic system disorder—simultaneously.

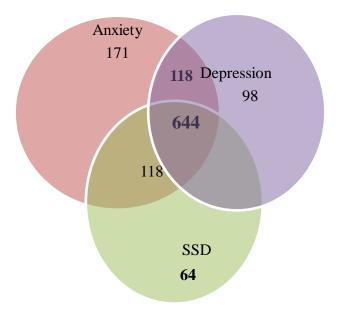


Figure 6: Venn diagram showing overlapping of anxiety, depression & somatic symptom disorder (n = 1547): anxiety= 1264; depression = 1137; somatic symptom disorder = 993

Anxiety + Depression = 281

Anxiety + SSD = 171

Depression + SSD = 118

All three (Anxiety + Depression +SSD) = 644

Table 13: Pearson's correlation analysis of Anxiety, Depression & Somatic Symptom disorder among patients visiting general physicians.

	SSD	DEPRESSION	ANXIETY
SSD	1	.245**	.069
DEPRESSION	.245**	1	.386**
ANXIETY	.069	.386**	1

\*\*. Correlation is significant at the 0.01 level (2-tailed).

To know strength of relationship of anxiety, depression & somatic system disorder, Pearson's correlation analysis was performed. The table 13 depicts the model summary, indicating that anxiety has a positive relationship with depression with Pearson's correlation value of .386. This correlation is significant at the 0.01 level. Anxiety is also having a positive relationship with somatic symptom disorder but this relationship is not significant as it has Pearson correlation value of .069. Depression is carrying a positive relationship with somatic system disorder with Pearson correlation value of .245. This correlation is significant at the 0.01 level.

So the results shows that anxiety, depression and somatic system disorder having a positive correlation with each other, but significant relationship exists between anxiety and depression as well as between depression and somatic system disorder.

Thus the Hypothesis H.3 which states, "There exists significant relationship among Anxiety, Depression and Somatic Symptom Disorder in patients visiting general physicians", is accepted.

#### **CONTENT VALIDITY:**

Two rounds of expert judgment were made. Service of two academician and two psychiatrists was taken for this purpose. According to Aiken's rule, a minimum V coefficient of 0.92 is required to guarantee the validity of evaluations from four experts with a rating category of four. Three session objectives with a coefficient of 0.83 from the first set of findings did not meet the criteria for validity. Following the first round, changes were made in response to the

expert's feedback. Additional clarification of clinical symptom priority, analysis of health difficulties, and management of detected mental health disorders were the adjustments made. After the first round of changes, the second one was held. According to the Aiken's V result, the lowest score was 0.92 and the highest was 1.00. Based on professional assessment, it can be said that the training module has good content validity. The following table no. 14 contains the findings for the second round of expert judgment.

Table 14 Expert judgment results of training content validity.								
	RATING							
Session Topics	<u>A- (</u>	01 A-02		P-04	Aiken's V			
Identification the probable psychological symptoms Brief Interview skills for assessing Psychological patients	4	4	3	4	0.92			
Model of initial interview	4	4	3	4	0.92			
Applying GHQ-12 scale while Interviewing	4	4	3	4	0.92			
Prioritising the clinical symptoms Rule out organic cause		3	4	4	0.92			
Recognising mental health problems	4	4	4	4	1			
To investigate whether the problem is self inflated, environmental or Biological	4	4	4	4	1			
Identifying the common mental health problems Skill of identifying different type of psychological problems		3	4	4	0.92			
Skill of judging the severity of problem	4	4	3	4	0.92			
Criteria of selecting the patients for referral to higher centres	4	3	4	4	0.92			
Analysing the health issues Understanding and diagnosing Anxiety	4	4	3	4	0.92			
Understanding and diagnosing depression	4	4	4	3	0.92			
Understanding and diagnosing SSD	4	4	3	4	0.92			
Use of different diagnostic tools—GAD-7, PHQ-9, PHQ-15	3	4	4	4	0.92			
Interventions to Manage identified mental health problems								
Different techniques of Interventions	4	4	4	3	0.92			
Skills of using Positive Psychological Activity	4	3	4	4	0.92			
Skills of using Applied relaxation	4	4	4	4	1			

Skills of using Motivational Interviewing	4	4	4	4	1
Skills of using Generic counseling	4	4	3	4	0.92
Monitoring the outcomes of BPI					
Informal interviews with GPs included for intervention	4	3	4	4	0.92
Informal interviews with GPs excluded from intervention		4	3	4	0.92
Comparison of both the included and excluded groups.		4	4	4	1

#### 4.2 Discussion

The purpose of this research was to develop and validate an interventional training module for the general practitioners so that they can identify common mental health problems more accurately and manage the same more effectively and also to validate the Brief Psychological interventional module.

After going through a number of studies, Indian & overseas, the author found very limited assess in enhancing the clinical skills of general practitioners in dealing with common psychological problems. Instead of the well established fact that general practitioners fail to identify and manage common mental health problems in their day-to-day practice (Zhang H., et al. (2019), Manjunatha N, et al., (2018), Pal (2018, Shoib et al. (2016), Choudhary and Mishra (2009) and Thai, N., and Nguyen (2018), not much training module developed for the same.

This author used the expert evaluation method and the Aiken formula to calculate a coefficient of content validity and item's internal consistency reliability. Aiken's content-validity coefficient is calculated based on experts assessment of item's relevance in measuring the intended construct, with rating categories arranged in a Likert-scale format. Calculating items content-validity value based on expert evaluation was proposed by Aiken (Aiken, 1980, 1985). The resulting Aiken's V validated the content validation of Brief psychological module. The lowest Aiken's V score calculated was 0.92, while the highest score was 1.00. Therefore, it can be concluded that the training module has good content validity based on expert judgment. The same methodology was done by Ningdyah, Greenwood Kidd (2018) to validate a psychology training model.

The findings of this study show that using expert judgment procedures, such as cautious selection of knowledgeable experts, is an important aspect of item selection. Experts could provide useful advice when evaluating items on the training-model scale because of their knowledge in mental health management. Items that could have impacted the scale's efficacy in differentiating between training models were identified during the overall judging process and were removed.

Because expert responders' comments on individual items provided phrasing suggestions, their more precise wording was used. They also put a lot of effort into changing or removing items that they thought were redundant or overlapping. The re-examination approach also includes examining the properties of each training model, particularly classification in content-based models.

The developed intervention was validated and after validation it can be said that the newly developed brief psychological intervention is having very encouraging results in improving the mental state of the patients having some mental health issues. The developed and validated brief psychological intervention was taught to the general practitioners. The skills to identify the common mental health problems or the diagnostic skills of the general medical practitioners improved significantly after the training. The results of present study simply show that after getting the mental health training, the diagnostic and management skills improved a lot after the interventional training.

A lot of studies, inside India or overseas, were reviewed during this research work. All the studies are suggestive of the improved diagnostic and management skills of the general practitioners after the mental health training. Empirically validated outcomes for "Brief Interventions in Primary Care were studied in the year 2011 also revealed the results with the similar finding. Greater improvement in anxiety, depression, and quality of care (Bradford, et al., 2011; Roy-Byrne, et al., 2010; Lang, 2003).Reduction of panic attacks in COPD patients (Livermore, Sharpe, & McKenzie, 2010). Improving treatment access for patients with PTSD (Possemato, 2011).Reduction in symptoms of insomnia (Buysse, et al., 2011).Improving treatment adherence for patients with comorbid Improving treatment adherence for patients with comorbid diabetes and depression (Lamers, Jonkers, Bosma, Knottnerus, & Van Eijk, 2011; Osborn, et al., 2010. Increased self-management skills (Battersby, et al., 2010; Damush et al., 2008; Kroenke et al., 2009).Improved quality of life for patients with chroniccardio-pulmonary conditions (Cully, et al., 2010).Reduction of substance abuse (

Whitlock, et al., 2004). Earlier of identification and intervention for pediatric behavior problems (Berkovits, O'Brien, Carter, & Eyberg, 2010; Laukkanen et al., 2010). Reduction of somatization (Escobar, et al., 2007; Kroenke& Swindle, 2000)."

In this study, as the Table 7 enunciates the efficacy of brief psychological intervention on improving identification skills of general practitioners to identify common mental health problems in their day-to-day practice. Similar results were also verified through other such types of studies. A similar type of research work on interventions was done by **Ramanuj & Ferenchick** (2019) which helped the primary care physicians. According to the study, systems-based treatments must enable primary care practices to screen for depression and reliably identify it in a context with effective treatment and sufficient follow-up.Breathing exercises for anxiety symptoms and scheduling activities for symptoms of depression.

Table 7 also shows that general practitioners fail to identify up to 56% of the patients suffering from anxiety, depression and somatic symptom disorder. This finding correlates with the finding of **Pal** (2018) showing only 45 percent of cases were accurately diagnosed by primary care physicians, meaning they missed 55 percent of the time, after conducting an observational study at a rural primary health care clinic. Primary care physicians had shown their inability in diagnosing a large portion of depression cases. This finding highlighted the need for additional training to enhance early diagnosis and thus increasing referral rates.

Baldwin &Ruini (2014) did a review on "Psychological interventions in the treatment of generalized anxiety disorder" and concluded that anxiety can mild to moderate level of anxiety can very effectively and easily be treated by psychological interventions. The authors named a few interventions like "CBT, applied relaxation, psychodynamic treatments, internet-computer-based CBT, mindfulness techniques, interpersonal emotional processing therapy and well-being therapy". Applied relaxation has been shown to be equally effective as CBT. Although first results are promising, additional research is needed to prove their worthin comparison with traditional CBT. Novel techniques and modifications of GAD, such as "well-being therapy", have created to provide broader range of treatment options.

These results of increased general practitioners skills as an effect of training has also been found in the study done by **Dan MacCarthy et al.** (2013). At the conclusion of the training, family physicians reported high to very high success in integrating the self-management tools into their practices, as well as a positive to very positive impact on patients. Family doctors said they felt more confident diagnosing and treating mental health patients, making care plans, and prescribing drugs. The doctors said that their patients were better able to stay or

return to work. At 3 to 6 months, the results were maintained or enhanced. Furthermore, family physicians reported higher personal job satisfaction (67.2%) and a lower dependency on antidepressant medications (39.5%).

Patel et al. (2010) published a study in Lancet titled "Effectiveness of an intervention led by lay health counsellors for depressive and anxiety disorders in primary care in Goa, India (MANAS): a cluster randomised controlled trial". As per this study, the frequency of occurrence of all these disorders varies a lot in primary care. This frequency is having the mean value of 20%, and this value comes from the studies of 14 countries. But less than one third of these cases are identified and diagnosed at general practice level. There are lot of studies showing the great efficacy of brief psychological treatments and antidepressant drugs treating common mental disorders, but the data establishing the efficacy of psychological intervention treating the mental disorders is still facing many obstacles. These hindrances include the minimal identification of psychological problems by general practitioners.

Lack of knowledge on the part of general practitioners leads to treatment gap. The findings of this research in tune of the findings of Dr. R. Srinivasa Murthy, Professor of Psychiatry (Retd), Formerly of NIMHANS, Bangalore, Karnataka, India. In the editorial commentary of the National Mental Health Survey of India 2015–2016 he said that treatment gaps for mental illnesses ranged from 70% to 92 percent for various disorders, with an average of 85 percent for common mental disorders & 73.6 percent for severe mental disorders.

Gledhill, Kramer and Garralda (2003) did a study titled, "Training general practitioners in the identification and management of adolescent depression within the consultation: a feasibility study" with the aim of the study was to assess the feasibility and effects of the training intervention. Sensitivity of GPs identification skill improved from 20% to 43% after getting the training. Adolescents interviewed appreciated the intervention.

These results are similar to the study done by **Naismith et al.** (2001) who studied the effect of mental health training on general practitioners' management of common mental disorder. The study was performed in Australia, and under this study total 12 hours training, divided into four seminars, was provided to the general practitioners. Like this study, the focus was on improving G.Ps' capacity to identify and manage patients with depression and anxiety. The results of the study showed the G.Ps who had undergone training had shown higher degree of diagnostic skills in managing common mental disorders than those who did not have training (36% versus 29%).

As per table no. 2, prevalence of common mental disorders to the patients approaching general practitioners is 51.56%. This finding resonates with the finding of the report on Mental health into primary care by WHO and World Organization of Family Doctors (Wonca) (2008), stating that mental disorders are found in each and every country, and is as high as 60% of those approaching PCC are having some mental health issue. The prevalence of psychological disorders is even higher in cardiac OPDs. Verma M. et al. (2019) conducted a study to determine the prevalence of depression and GAD in the senior population with diabetes and/or hypertension, as well as risk factors for psychiatric illness. A total of 320 people took part in the cross-sectional investigation. The findings revealed that G.A.D. was present in up to 38.7% of the population, with 19.7% scoring in the severe range. GAD and depression were detected in 37.8% of the people. Female gender, nuclear family, low-income status, and hypertension, have all been risk factors to depression and GAD. The findings of table no. 2 also gel with findings of Grover et al. (2018), saying that roughly 30% of 1607 participants in a cross-sectional study had depression, as measured by the PHQ-9. The most disturbing conclusion was that 16.7% of these people had suicidal thoughts. According to this survey, a large number of doctors in India suffer from depression, stress, and burnout. These psychological issues are also linked to extended work schedules, unfavorable patient outcomes, and negative interpersonal as well as patient-doctor relationships.

**Indu et al.** (2017) had also shown the similar trend because in his study the total prevalence of depression was found to be 27.2 percent. This study looked at 827 patients who went to their doctor for a non-mental health issue. The study's goal was to see how common depression and previous suicide attempts were among adult outpatients in primary care. The total prevalence of depression was shown to be greater in women, similar to the finding of the present study.

Federal de São Paulo, São Paulo (2012) estimated that about 25 to 30% consultations of a physicians are related to mental disorders only. Diagnosing a mental disorder patient is a difficult task. Lack of time for the patient and lack of specific skill are considered being the two main reasons for this. Another study done by Srinivasan et al. (2006) at a primary care center in south India was also having the similar findings. During study 12,886 patients participated in survey under community mental health program, and discovered that "major depressive disorder and dysthymia" were prevalent in 34 percent. Despite the fact that depression may be treated well in primary care centers in 60-80% of instances, only 10 to 25% of people seek therapy. It's due to a lack of understanding and stigma.

Ansseau and Dierick (2004) revealed that there is great prevalence of mental disorder in PCC setups. The threshold psychiatric disorders were detected as high as 42.5 % of all patients. Verma K.K. et al (2001) conducted a study in Bikaner (India) and concluded with the finding that diagnosable psychological illness was found to be widespread (75 percent) among patients attending cardiac outpatient departments. Depressive illness was the most prevalent diagnosis (38.67 percent), followed by panic disorder (38.10 percent). This study aimed to assess ratio of psychiatric morbidity among patients visiting a tertiary care center's cardiology OPD. This was a cross-sectional study and convenient sampling technique was used. The intend of study was to discover prevalence of psychiatric morbidity in patients attending the cardiology OPD. This will aid in the timely diagnosis & treatment of various "non-cardiac psychiatric problems", thereby lowering mortality, improving quality of life, & hastening recovery of patients having heart ailments.

Results obtained from **Table no. 3** shows that there lies significant difference between the score of male & female patients visiting general practitioners, indicating that females are facing more mental health problems than males. The study done by Verma M. et al. (2019) also substantiated this finding by concluding that female gender is one of the leading risk factor to anxiety and depression apart from nuclear family, low-income status & hypertension. This study has substantiated the results as per the WMH Survey conducted by **Sagar et al.(2017)** with a concluding sample size of 24,371 individuals, revealed that in comparison with males, the episodes of GAD were as high as double (4.42% vs. 2.44%) & pervasiveness of mood disorders was 1.6 times elevated in women. Anxiety disorders (3.41 percent)was most common in the previous year, followed by depressive disorders (1.44 percent). Specific phobias were most prevalent anxiety condition, while depressive episodes were most common mood disorders discovered in the study.

The study done by **Sideeq K.et al.** (2017)also revealed that females are having more anxiety than males. Among the anxious patients, 86% were females, from the total sample of 1553 patients. The finding of Sideq K. et al. (2017) also gel with the finding of present study in terms of psychological problems as per socioeconomic status of patients. In that study about  $2/3^{\rm rd}$  patients belonged to class II (middle class) socioeconomic status. As per table no. 5, about 66 % patients having mental health problems belong to middle class. This research was on the occurrence of generalized anxiety disorder. The prevalence was to study among the patients who were attending a peripheral clinic in Kashmir valley. The study concluded with the findings which states that the prevalence of GAD in that urban based population of the Kashmir valley is approximately equal to the level of the prevalence at national level.

Anita (2016) looked at the prevalence of somatic complaints in adolescents and how it differed by gender and age. She finished her research by discovering that females are reporting more somatic complaints than males. There were significant differences between girls and males in 24 of the 35 symptoms included on the PSS scale. In DSM-5 ("Diagnostic and Statistical Manual for Mental Disorders, Fifth Edition" (2013) it was also stated that women generally presented with "somatic symptom disorder" more often than men, with estimated male-female ratio of 1:10.

Results obtained from Table no. 4revealed that prevalence of anxiety, depression and somatic symptom disorder is 42%, 38% and 33% respectively. This study has substantiated the results of **Verma et al. (2019)** revealing prevalence of anxiety up to 38.7% and depression in 37.8% of the population. Results from Table no. 4of this study are also close to the results of **Mores.et al. (2015)**, who concluded their study with the finding that Anxiety was having the prevalence of 37.91% and Depression was seen in 28.30% among the patients visiting primary care centers. These two patients were the common psychosomatic diseases among the participants. Apart from these two the study also highlighted that disturbed sleep (75.83%),acidity (42.08%),headache (33.75%) and backache (28.90%) were also the common presentation among the participants of the study.

According to the online article of Mental Health America by Federal de São Paulo, São Paulo (2000) added that about 25 to 30% consultations of a physicians are related to mental disorders only. Diagnosing a mental disorder patient is a difficult task. Lack of time for the patient and lack of specific skill are considered being the two main reasons for this. Mental disorders are having much prevalence in society and it makes a significant amount of patients a reason to consult their family physicians.

Srivastava et al. (2016) researched to find out that out of all the disease globally, almost 14% diseases are in of neuropsychiatric-disorders. This level of mental problems is most likely less reported for there are many clinical presentations of mental disorders which are being addressed as physical disorders. Mental health is a matter of concern across the globe and India is also progressing very fast to embrace it. If we evaluate developments in sphere of mental health, speed is slow. Hans, Stephan et al. (2003) studied mental disorders in primary care and found that prevalence of depressive disorders had estimated to be around 10 percent of patients visiting PCCs.

**Table no. 13** shows significant relationship among Anxiety, Depression & Somatic Symptom Disorder in patients visiting general physicians, and figure 7 having Venn diagram showing overlap of anxiety, depression & somatic symptom disorder. Results of **table no. 13** are showing significant relationship among Anxiety, Depression and Somatic Symptom Disorder in patients visiting general physicians. **Zheng et al. (2019)** also studied the relations of depression, somatic symptoms and anxiety and found that somatic symptoms in patients having cardiac neurosis were coupled with both anxiety (46%) & depression (50%). Thus effective emotional interventions must be delivered to promote patient rehabilitation.

The research by Heeren et al. (2018) also contributes to a modest but growing body of evidence showing that the co-occurrence of two illnesses is best represented as a collection of symptom-to-symptom links. Because some individual symptoms have a varied relationship with GAD and depression, such symptoms could be useful targets for future research and treatment. Symptoms with the strongest cross-association with the other disorder were identified for each disorder. Bekhuis et al. (2015) said that depressive and anxiety disorders have strong and partly varied correlations with somatic symptoms, according to this study. Future study should look at whether taking somatic symptoms into account and treating them effectively improves treatment outcomes in depressed and anxious patients. BerndLöwe et al. (2008), after successfully conducting this study on 2091 patients revealed the similar results by concluding that in more than fifty percentage of cases, overlapping existed between depression, anxiety and somatization. Apart from their comorbidities, anxiety, depression and somatization did have important and individual effects on certain areas of functional impairment.75% of depressed patients had comorbid anxiety, somatisation or both; 57% of the patients with anxiety had comorbid depression, somatisation; or both and 54% of the patients with somatisation had comorbid depression, anxiety or both.

Koh et al. (2008) also found the relation of anxiety, depression and somatic symptom, and concluded that in anxiety disorders, anxiety is likely to be a major source of somatic symptoms, but in somatoform disorders, both anxiety and depression are likely to be major causes of somatic symptoms. Furthermore, among anxiety disorder patients, only anxiety had a direct effect on somatic symptoms, whereas in somatoform disorder patients, both anxiety and sadness had direct effects on somatic symptoms. Even the studies done earlier also proved the same finding. Like the study of **Simon et al. (1991)** concluded with the result saying that overt manifestation of psychological distress and psychiatric disorders was highly linked to an increase in somatization symptoms. Current psychological symptoms were reported by 63 percent of respondents with five or more current functional somatic complaints, and 50

percent satisfied criteria for a current psychiatric diagnosis. Somatization symptoms had the strongest correlations with anxiety and depression symptoms, a moderate correlation with psychotic illness symptoms, and the poorest correlations with substance addiction and antisocial personality traits. Another study done by Simon GE (1991) also found relationship between anxiety, depression& somatic symptoms found that the presence of somatic symptoms is associated with at least a two fold increase in anxiety or depression.

Because our findings were based on a sample of GPs and were confined to patients with a physical complaint, they cannot be applied to the entire population. But as compared to primary care population, overlapping of anxiety, depression and SSD is not so prevalent in general population. A research work done by **Kohlmann et al.** (2016) is testimonial to that, and this research concluded with the finding that in the general population, the overlap of somatic, anxious, and depressive symptoms is prevalent, although it appears to be less common in primary care patients. The overlap of SSD, anxious & depressive disorders must be taken into account when estimating health-care usage in the general population.

According to **Loh et al.** (2018), data on general practitioners' attitudes regarding depression in India is not well known. The ability to examine their knowledge and perspectives on clinical depression, diagnosis, and treatment is severely limited. Even their overall understanding of the topic and their cross- sectional study was undertaken, with data collected from 80 physicians and physician trainees recruited from community clinics in Gujarat, who were primarily non-psychiatric. Interviews were performed with 29 of the eighty practitioners to learn what they are doing in their individual practices to diagnose and treat clinical depression. Overall, the results indicated that the physician had a strong comprehension of the subject in terms of definition and therapy. However, there were certain stigmatized attitudes regarding clinical depression. These findings highlighted the possibility of some stigma among physicians, who themselves highlight the importance of overcoming physician stigma and boosting awareness of diagnosing and treating severe depression.

Shoib et al. (2016)also finished the research work with the conclusion that depression and anxiety are extremely common and largely undiagnosed in primary care settings. The majority of practitioners underestimate the importance of endocrinological co-morbidity in the outset, resulting in delayed diagnosis.

Although very few studies are conducted in India to know about the diagnostic skills of general practitioners, but a study conducted by **Choudhary and Mishra** (2009)is very

relevant here. Authors undertook an important study in and around Ludhiana to learn about general practitioners' knowledge and attitudes concerning prevalent mental health problems, and they discovered some surprising results. According to the survey, the majority of "nonpsychiatrist medical practitioners" (79.7%) are unaware of any diagnostic criteria and had no experience or ever trained in dealing with mental illness. Their mental patients are treated based on their own intuitions. In this study, almost all of "non-psychiatrist medical practitioners" concurred that prevalence of mental health issues was rising among the general public. Because the information they received throughout their training time was limited for two to three weeks, the maximum (98.5 percent) of the practitioners believed that they and other practitioners needed to know more about psychiatric disorders and treatment options. According to the report, there is fewer than one psychiatrist available for every one lakh Indians, indicating that the gap between resources and needs is still too wide. Because of the large gap, the majority of psychiatric patients do not receive proper treatment and consequently continue to suffer from long-term disease, which leads to disability. Patients who are fortunate enough to seek the advice of a psychiatrist do so much later, when the disease has progressed to the point where it is chronic and resistant to treatment. Another concern is the scarcity of psychiatrists, as well as a lack of knowledge about how to recognize and treat common health problems he majority of them (79.7%) have no idea what diagnostic criteria are utilized to diagnose "mental health problems". They are aware of the etiology, rising prevalence, and treatment options for mental health issues. They provide medication and therapy to the patients, although the bulk of them have no professional training in these areas. The maximum practitioners believe that current mental health treatments were insufficient to meet people's requirements. As a result, we came to the conclusion that general practitioners need more training in dealing with patients who have mental health issues, and that existing mental health services need to be improved.

**Zhang et al.** (2019) also recognised that general practitioners were short on tactics and that they desired for appropriate training so that they could have enough practice. It was discovered that GPs were unable to identify the instances for two reasons. First, general practitioners were having trouble making diagnoses because they lacked the necessary expertise and confidence, and their criteria for making mental diagnoses were unclear.

Manjunatha et al., (2018) published a research paper titled "Designing and executing an innovative digitally driven primary care psychiatry program in India", and said that the maximum mental patients contact their family doctor around the world, including India.

However, the doctors only provide symptomatic alleviation to all of those patients, which is insufficient.

**Thai and Nguyen** (2018) stated that depression was an illness that could be treated, but less fifty percent of those affected around world, and in some nations, less than 10 percent receive the attention and assistance they require. The real significant difficulties in treating mental diseases, particularly depression, include a lack of adequate resources and psychiatric treatments, as well as social stigma & a lack of "mental health literacy (MHL)".

The leading cause of the treatment gap is failure to identify the problem by general practitioners at their clinics. **Sagar et al.** (2017) found 95 percent treatment gap, with just 5 percent people with common mental disorders receiving any treatment. These findings were part of a large survey conducted on prevalence and treatment gap for common mental diseases in 24371 people in India over the course of a year. These findings come from a multi-site epidemiologic survey that was place in several Indian states. The survey looked at not only the prevalence and physical co-morbidity of mental diseases, but also their functioning, correlations, and treatment visits to find a cure.

# CHAPTER 5 Summary

# **CHAPTER 5**

# 5.1 Summary

In this study, a brief psychological intervention to manage common mental health problems at general practice has successfully been developed, validated, and its effect on general practitioners in identifying and managing common mental health problems had been studied. It was found that this newly developed brief psychological intervention helped a lot to the general practitioners to sharpen their diagnostic and management skills.

# 5.2 Conclusions

- 1. A brief psychological intervention to manage common mental health problems at general practice has successfully been developed, and the newly developed intervention was validated.
- 2. The results of present study revealed that pre intervention scores of anxiety, depression & somatic system disorder of the experimental & control group were almost having homogeneous values. Among the variables, no significant difference was found in control & experimental group.
- 3. After the intervention delivered to experimental group, mean score of anxiety, depression &somatic system disorder had shown a significant reduction.
- 4. There is no significant differences seen among the scores of anxiety, depression & somatic system disorder between pre & posttest of control group.
- 5. The mean score of anxiety, depression and somatic system disorder between experimental & control group after intervention are having a significant difference. The mean score of experimental group anxiety, depression& somatic system disorder is significantly low than the control group in post test. This shows the effect of intervention among the experimental group.
- 6. Relationship of anxiety, depression and somatic system disorder was studied. The results revealed that anxiety, depression and somatic system disorder having a positive correlation with each other, but significant relationship exists between anxiety and depression as well as between depression and somatic system disorder.

Table 14: Conclusion of Research

S. No.	HYPOTHESIS	SIGNIFICANT/ INSIGNIFICANT	ACCEPTED/ REJECTED
1	The Brief Psychological Intervention will show significant difference between control and experimental group in identifying three most common mental health problems—Anxiety, Depression and Somatic Symptom Disorder at General Practice level.	Significant	Accepted
2.1	There exist no significant difference between control and experimental group before intervention with regard to Anxiety, Depression and Somatic Symptom Disorder among patients at General Practice level.	Significant	Accepted
2.2	There exist a significant difference between pre and post experimental group after intervention with regard to Anxiety, Depression and Somatic Symptom Disorder among patients at General Practice level.	Significant	Accepted
2.3	There exist a significant difference between experimental and control group after intervention with regard to Anxiety, Depression and Somatic Symptom Disorder among patients at General Practice level.	Significant	Accepted
3	There exists significant relationship among Anxiety, Depression and Somatic Symptom Disorder in patients visiting general physicians.	Significant	Accepted

**Conclusion**: The content and empirical validation of the developed brief psychological intervention is successfully done. The conclusion is drawn from the findings that the brief psychological intervention helps the general practitioners to identify and manage common psychological problems.

# REFERENCES

## **REFERENCES**

- Abdulbari, B., Mohammed Al-Kazaz, Ftouni, D., Munjid Al-Harthy & Elnour E (2013). Diagnostic overlap of depressive, anxiety, stress and somatoform disorders in primary care. *Asia-Pacific Psychiatry*, 5, 29–38. DOI:10.1111/j.1758-5872.2012.00215.x
- Alexandre, D., Filippon, Paula, A., Braga, Carla, & Andreoli, Sérgio Baxter. (2005). The general practitioner and mental health problems: challenges and strategies for medical education. *Sao Paulo Medical Journal*, 123(2), 72-76.
- Aiken, L. R. (1980). Content validity and reliability of single items or questionnaires. *Educational and Psychological Measurement*, 40(4), 955 - 959. doi: 10.1177/001316448004000419.
- Aiken, L. R. (1985). Three coefficients for analyzing the reliability and validity of ratings. *Educational and Psychological Measurement*, 45, 131-142. doi: 10.1177/0013164485451012.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
- American Psychiatric Association task force on treatments of psychiatric disorders. (1989). Treatments of psychiatric disorders. 1-3.
- Anjara SG, Bonetto C, Ganguli P, Setiyawati D, Mahendradhata Y, Yoga BH, et al. (2019). Can General Practitioners manage mental disorders in primary care? A partially randomised, pragmatic, cluster trial. *PLoSONE*, 14(11): e0224724. doi.org/10.1371/journal.pone.0224724
- Asha, C.S., Kumar, C.T.S., Punnoose, V.P. & Jacob, J. (2019). Anxiety and depression associated with vertigo: a cross sectional study from India. *Int J Otorhinolaryngol Head Neck Surg.* 5(2):291-298 DOI: <a href="http://dx.doi.org/10.18203/issn.2454-5929.ijohns20190446">http://dx.doi.org/10.18203/issn.2454-5929.ijohns20190446</a>
- Bagayogo, I.P., Turcios-Wiswe, K., Taku, K., Peccoralo, L. Katz, C.L. (2018). Providing Mental Health Services in the Primary Care Setting: the experiences and perceptions of general practitioners at a New York city clinic. https://doi.org/10.1007/s11126-018-9587-2

- Bekhuis E., Boschloo L., Judith G.M., Robert A. S. (2015). Differential associations of specific depressive and anxiety disorders with somatic symptoms. *Journal of Psychosomatic Research*, 78, 116–122. doi.org/10.1016/j.jpsychores.2014.11.007
- Bettina (2012). What is Anxiety? What Causes Anxiety? Retrieved from http://www. Bachflower.com/what-is-anxiety-what-causes-anxiety/
- Bodie, G. D. (2010). A racing heart, rattling knees, and ruminative thoughts: Defining, explaining, and treating public speaking anxiety. *Communication Education*, 59(1), 70-105.
- Bashar, M.A., Mehra, A. & Aggarwal, A.K. (2019) .Integrating mental health into primary care for addressing depression in a rural population: An experience from North India. *Indian J Psychiatry*, 61(3): 319–321. doi:10.4103/psychiatry.IndianJPsychiatry\_374\_18:
- Baxter AJ, Scott KM, Vos T, Whiteford HA. (2013). Global prevalence of anxiety disorders: a systematic review and meta-regression. *Psychol Med*;43(5):897-910.
- Bélanger, L., Ladouceur, R., Morin, C.M. (2005) Generalized anxiety disorder and health care use. *Canadian Family Physician*, 51:1362-1363.
- Bener, A., Al-Kazaz, M., Ftouni, D., Al-Harthy, M. & Elnour, E. (2013). Diagnostic overlap of depressive, anxiety, stress and somatoform disorders in primary care. *Asia-Pacific Psychiatry*, 5, 29–38.
- Bernd Löwe; Robert L. Spitzer; Janet B.W. Williams; Monika Mussell; Dieter Schellberg; Kurt Kroenke (2008). Depression, anxiety and somatization in primary care: syndrome overlap and functional impairment. j.genhosppsych.30(3), 191–199. doi:10.1016/j.genhosppsych.2008.01.001
- Bizzi F., Ensink K., Borelli J.L., Mora S.C. and Cavanna D. (2018). Attachment and refective functioning in children with somatic symptom disorders and disruptive behavior disorders. *European Child & Adolescent Psychiatry*, 28:705–717 doi.org/10.1007/s00787-018-1238-5
- Carey, M., Small, H., Yoong, S.L., Boyes, A., Bisquera, A. &Sanson-Fisher, R. (2014).

  Prevalence of comorbid depression and obesity in general practice: a cross-

- sectional survey: *Br J Gen Pract*. 64(620):122-127. DOI: 10.3399/bjgp14X677482.
- Chadda Rakesh K. (2018) Youth & mental health. *Indian Journal of medical research*, 359-361. DOI: 10.4103/ijmr.IJMR\_1585\_18
- Chandrashekhar CR, Reddy MV. (1998). Prevalence of mental and behavioural disorders in India: a meta-analysis. Indian J Psychiatry, 40:149-157.
- Chaudhary R.K. and B. P. Mishra B.P. (2009). Knowledge and practices of general practitioners regarding psychiatric problems. *Ind Psychiatry Journal*, 18(1): 22–26. doi: 10.4103/0972-6748.57853
- Chatterton, L., Tarrier, N., & Hall, P. L. (2007). Cognitive therapy for low self-esteem in the treatment of depression in an older adult. *Behavioural and Cognitive Psychotherapy*, 35, 365–369.
- Colman, I., Ploubidis, G. B., Wadsworth, M. E. (2007). A longitudinal typology of symptoms of depression and anxiety over the life course. *Biological Psychitary*, 62, 1265-1271.
- Costello, E. J., Mustillo, S., Erkanli, A., Keeler, G., & Angold, A. (2003). Prevalence and development of psychiatric disorders in childhood and adolescence. *Archives of General Psychiatry*, 60, 837-844
- Cozzi G., Minute M., Skabar A., Pirrone A., Jaber M., Neri E., Montico M., Ventura A. and Barbi E. (2017). Somatic symptom disorder was common in children and adolescents attending an emergency department complaining of pain. *Acta Paediatric*,106(4):586-593 doi: 10.1111/apa.13741
- Cozz G and Barbi E. (2018). Facing somatic symptom disorder in the emergency department. *Journal of Paediatrics and Child Health*, 55: 7-9
- Dan Mac Carthy, RivianWeinerman, Liza Kallstrom, Helena Kadlec, Marcus J Hollander, Scott Patten. (2013). Mental Health Practice and Attitudes of Family Physicians Can Be Changed!. *The Permanente Journal*, 17(3), 14-17. doi: 10.7812/TPP/13-033

- Endsley, P., Weobong, B., & Nadkarni, A. (2017). The psychometric properties of GHQ for detecting common mental disorder among community-dwelling men in Goa, India. *Asian journal of psychiatry*, 28, 106-110.
- Eslami, A. A., Rabiei, L., Afzali, S. M., Hamidizadeh, S., & Masoudi, R. (2016). The effectiveness of assertiveness training on the levels of stress, anxiety, and depression of high school students. Irarian. *Red Crescent Medical Journal*, 18(1), 1096.
- Fatema K., Mahendra P.S. & Santosh K.C. (2019). Acceptance and commitment therapy in patients with somatic symptom disorder: A case series. *Indian journal of clinical psychology*, 46:1; 46-51.
- First Post (2018). Budget 2018: Health, education, sanitation allocation appears to be most in 3 yrs but it isn't. Retrieved from <a href="http://www.firstpost.com/business/budget-2018-health-education-sanitation-allocation-appears-to-be-most-in-3-years-but-it-isnt-4332137.html">http://www.firstpost.com/business/budget-2018-health-education-sanitation-allocation-appears-to-be-most-in-3-years-but-it-isnt-4332137.html</a>
- Ganguli IH. (2000). Epidemiological findings on prevalence of mental disorders in India. *Indian J Psychiatry*, 42,14-20.
- Gledhill J., Kramer T., Iliffe S. & Garralda M. (2003). Training general practitioners in the identification and management of adolescent depression within the consultation: a feasibility study. *Journal of Adolescence*, 26 245–250 doi:10.1016/S0140-1971(02)00128-8
- Grover, S., Sahoo, S., Bhalla, A. &Avasthi, A. (2018). Psychological problems and burnout among medical professionals of a tertiary care hospital of North India: A cross-sectional study. *Indian J Psychiatry*. 60(2): 175–188.
- Haftgoli, N., Favrat, B., Verdon, F. *et al.* (2010). Patients presenting with somatic complaints in general practice: depression, anxiety and somatoform disorders are frequent and associated with psychosocial stressors. *BMC Fam Pract*, **11**, 67. doi.org/10.1186/1471-2296-11-67
- Han, C., Pae, C. U., Patkar, A. A., Masand, P. S., Kim, K. W., Joe, S. H., & Jung, I. K. (2009). Psychometric properties of the Patient Health Questionnaire–15 (PHQ–15) for measuring the somatic symptoms of psychiatric outpatients. *Psychosomatics*, 50(6), 580-585.

- Harris Anthony D., McGregor J., Perencevich E., Furuno J., Zhu J., Peterson D. and Finkelstein J. (2006). The Use and Interpretation of Quasi-Experimental Studies in Medical Informatics. *Journal of the American Medical Informatics Association*, 13; 1 DOI 10.1197/jamia.M1749.
- Hassani, S., & Rajab, A. (2012). General communication anxiety among EFL students: A case of Iranian students of intensive English programs. *Procedia-Social and Behavioral Sciences*, 66, 410-418.
- Heeren, Alexandre; Jones, Payton J.; McNally, Richard J. (2018). Mapping network connectivity among symptoms of social anxiety and comorbid depression in people with social anxiety disorder. *Journal of Affective Disorders*, 228(), 75–82. doi:10.1016/j.jad.2017.12.003
- Henningsen, P.(2003). Medically Unexplained Physical Symptoms, Anxiety, and Depression: A Meta-Analytic Review. *PsychosomMed*, 65(4):528-33. DOI: 10.1097/01.PSY. 0000075977.90337.E7
- Herman, J. S., Miller, C. R., & Massman, P. J. (1985). Cognitive therapy versus systematic desensitization: is one treatment superior? *Psychological Bulletin*, 97(3), 451-461.
- Hills, D., Hills, S., Robinson, T.& Hungerford, C.(2019). Mental Health Nurses Supporting the Routine Assessment of Anxiety of Older People in Primary Care Settings. Insights from an Australian Study, *Issues in Mental Health Nursing*, DOI: 10.1080/01612840.2018.1517285
- Huang Wei-Lieh, Liao Shih-Cheng, Yang Cheryl C.H., Kuo Terry B.J., Chen Tzu-Ting, Chen I-Ming, and Gau Susan Shur-Fen. (2017). Measures of heart rate variability in individuals with somatic symptom disorder. *Psychosomatic Medicine*, 79 (3) 4-42
- Indu, Pillaveetil Sathyadas, Anil kumar, Thekkethayyil Viswanathan, Pisharody, Ramdas, Russell, Paul Swamidhas Sudhakar, Raju, Damodaran, Sarma, P. Sankara, Remadevi, Saradamma, Amma, K.R. Leela Itty, Sheelamoni, A., Andrade, Chittaranjan. (2007). Prevalence of depression and past suicide attempt in adult outpatients in primary care. *Asian Journal of Psychiatry*. 27: 48-52 doi.org/10.1016/j.ajp.2017.02.008

- James, L.C. (2006). Integrating Clinical Psychology Into Primary Care Settings. *Journal of clinical Psychology*, 62 (10), 1207–1212.
- J.W. Williams et al. (2002). Identifying depression in primary care: a literature synthesis of case-finding instruments. *General Hospital Psychiatry*, 24: 225–237
- Jayaram, G., Goud, R., Chandran, S. and Pradeep, J. (2019).MAANASI A Sustained, Innovative, Integrated Mental Healthcare Model in South India. *Disability, CBR & Inclusive Development*, 30(2), pp.104–113. DOI: doi.org/10.5463/dcid.v30i2.851
- Jessica Calleo, Melinda A, et al.(2009). Generalized Anxiety Disorder in Older Medical Patients: Diagnostic Recognition, Mental Health Management and Service Utilization. *J ClinPsychol Med Settings*, DOI 10.1007/s10880-008-9144-5
- Johan Ormel, Michael Von Korff, et al. (1994) Common Mental Disorders and Disability Across Cultures Results From the WHO Collaborative Study on Psychological Problems in General Health Care. *JAMA*. 272:1741-1748.
- Kessler, R. C., Chiu, W. T., Demler, O., & Walters, E. E. (2005). Prevalence, severity, and comorbidity of twelve-month DSM-IV disorders in the National Comorbidity Survey Replication (NCS-R). Arch Gen Psychiatry, 62(6), 617-627
- Kim S.K., Hong J.S., Min K.J. and Han D.H. (2019). Brain Functional Connectivity in Patients With Somatic Symptom Disorder. *Psychosomatic Medicine*, 81, 313-318 DOI: 10.1097/PSY.00000000000000681
- Kirkwood, C. K., & Melton, S. T. (2002). Anxiety disorders. In J. T. Dipiro, R. L. Talbert, G.C. Yee, G. R. Matzke, B. G. Wells, L. M. Posey, Pharmacotherapy: A pathophysiologic approach (5th ed.). McGraw-Hill.
- Koh K.B., Kim D. K., Kim S.Y., Park J.K. & Han M. (2008). The relation between anger management style, mood and somatic symptoms in anxiety disorders and somatoform disorders. *Psychiatry Research*, 160, 372–379 doi:10.1016/j. psychres. 2007.06.003

- Kohlmann, Sebastian; Gierk, Benjamin; Hilbert, Anja; Brähler, Elmar; Löwe, Bernd (2016). The overlap of somatic, anxious and depressive syndromes: A population-based analysis. *Journal of Psychosomatic Research*, 90, 51–56. doi:10.1016/j.jpsychores.2016.09.004
- Kroenke, K., Robert, L., Spitzer, et all. (1998). A Symptom Checklist to Screen for Somatoform Disorders in Primary Care. *Psychosomatics*, 39:263–272.
- Kurt Kroenke, Robert L. Spitzer, Janet B.W. Williams, et al. (2007) Anxiety Disorders in Primary Care: Prevalence, Impairment, Comorbidity, and Detection. *Ann Intern Med*, 146:317-325.
- Lépine, J. P. (2002). The epidemiology of anxiety disorders: Prevalence and societal costs. The Journal of Clinical Psychiatry, 63(14), 4-8.
- Liao s., Ma H., Lin Y. and Huang W. (2019). Functioning and quality of life in patients with somatic symptom disorder: The association with comorbid depression.

  \*Comprehensive Psychiatry\*, 90: 88-94
- Loh, D.A., Joshi, A., Taku, K., Nathaniel, M. & Katz, C.L. (2018). Knowledge and attitudes Towards clinical depression among community medical providers in Gujarat, India. *Psychiatr Q* **89**, 249–259 <a href="https://doi.org/10.1007/s11126-017-9530-y">doi.org/10.1007/s11126-017-9530-y</a>
- Levenson James L., Sharma Aditi A. and Ortega-Loayza Alex G. (2017). Somatic symptom disorder in dermatology. *ClinDermatol*, 35(3):246-251 DOI: doi: 10.1016/j.clindermatol.2017.01.010
- Lian, L. H., & Budin, M. B. (2014). Investigating the relationship between English language anxiety and the achievement of school-based oral English test among Malaysian form four students. *International Journal of Learning, Teaching and Educational Research*, 2(1), 67-79.
- Limburg K., Sattel H., Dinkel A., Radziej K., Becker-Bense S. and Lahmann C. (2017). Course and predictors of DSM-5 somatic symptom disorder in patients with vertigo and dizziness symptoms— A longitudinal study. *Comprehensive Psychiatry*, 77:1—11 doi.org/10.1016/j.comppsych.2017.05.003

- Löwe B, Spitzer RL, Williams JB, Mussell M, Schellberg D, Kroenke K. (2008). Depression, anxiety and somatization in primary care: syndrome overlap and functional impairment. *Gen Hosp Psychiatry*. 30, 191-9.doi: 10.1016/j.genhosppsych.2008.01.001. PMID: 18433651.
- M. Ansseau M, Dierick F, Buntinkx F, Cnockaert P, De Smedt J. (2004). High prevalence of mental disorders in primary care. *Journal of Affective Disorders*, 78: 49 55
- Madhav M. (2001) Epidemiological study of prevalence of mental disorders in India. *Indian J Community Med.*, 26(4):10-12.
- Mash, R., Almeida, M., William C., Kumar, R. &Klaus B. (2015). The roles and training of primary care doctors: China, India, Brazil and South Africa; *Human Resources for Health*:13:93DOI 10.1186/s12960-015-0090-7
- Matsumoto, K., Sutoh, C., Asano, K., Seki, Y., Urao, Y., Yokoo, M., Takanashi, R.,
  Yoshida, T., Tanaka, M., Noguchi, R., Nagata, S., Oshiro, K., Numata, N.,
  Hirose, M., Yoshimura, K., Nagai, K., Sato, Y., Kishimoto, T., Nakagawa, A.,
  & Shimizu, E. (2018). Internet-based cognitive behavioral therapy with real-time therapist support via videoconference for patients with obsessive-compulsive disorder, panic disorder, and social-anxiety disorder: pilot single-arm trial. *J Med Internet Res*, 20(12), 1209.
- Menon V, Vivek A K, Sarkar S. (2017). Pathways to care for medically unexplained symptoms at a specialty psychosomatic clinic in south India in 2014. *Iran J Psychiatry Behav Sci.* 11(1):e5011. doi: 10.5812/ijpbs.5011.
- Michelson, D., Malik, K., Krishna, M., Sharma, R., Mathur, S., Bhat, B., Parikh, R., Roy, K., Joshi, A., Sahu, R., Chilhate, B., Boustani, M., Chorpita, B., Christopher G. & Patel V. (2019). Development of a transdiagnostic, low-intensity, psychological intervention for common adolescent mental health problems in Indian secondary schools. Behaviour Research and Therapy, 2019. doi.org/10.1016/j. brat.2019.103439
- Mohan, P., Sethi, H., Reddy,K.R. & Bhan, M.K. (2019). Designing primary healthcare systems for future in India. *Journal of Family Medicine and Primary Care*. 8(6): 1817–1820. doi: 10.4103/jfmpc.jfmpc\_422\_19: 10.4103/jfmpc.jfmpc\_422\_19

- More, S., Gaikwad, A. & Shelke, P. (2015). Prevalence of psychosomatic diseases among police personnel of Navi Mumba. *International Medical Journal*, 2(2): 72-74. <a href="http://www.medpulse.in">http://www.medpulse.in</a>
- Naismith SL, Hickie IB, Scot EM & Davenport TA.(2001). Effect of mental health training and clinical audit on general practitioners' management of common mental disorder. *The medical journal of Australia*, 175 Suppl: S42-7 PMID:11556436https://doi.org/10.5694/j.1326-5377.2001.tb143789.x
- National Mental Health Survey of India 2015–2016.Prevalence, pattern and outcomes.

  Downloaded http://www.indianjpsychiatry.org on Monday, April 13, 2020, IP: 117.197.169.199
- Ningdyah, A. E. M., Greenwood, K. M., & Kidd, G. (2018). A training model scale's validity and reliability coefficients: Expert evaluation in Indonesian professional psychology programs. *Makara Human Behavior Studies in Asia*, 22(1), 56-66. doi: 10.7454/hubs.asia.2190318
- Omani-Samani, R., Maroufizadeh, S., Ghaheri, A., & Navid, B. (2018). Generalized anxiety Disorder-7 (GAD-7) in people with infertility: a reliability and validity study. *Middle east fertility society journal*, 23(4), 446-449.
- Pal,S., Oswal, R.M., & Vankar, G.K. (2018). Recognition of major depressive disorder and its correlates among adult male patients in primary care. *Archives of Psychiatry and Psychotherapy*, 3: 55–62 DOI: 10.12740/APP/89963
- Pallant, J. (2005). SPSS survival manual: A step by step guide to data analysis using SPSS for Windows (version 12). Allen & Unwin.
- Patel Vikram (2017) The Healthy Activity Program (HAP), brief psychological treatment for severe depression in primary care. *Lancet* 389: 176–85
- Patel Vikram, (2010). Effectiveness of an intervention led by lay health counsellors for depressive and anxiety disorders in primary care in Goa, India (MANAS): a cluster randomised controlled trial. *Lancet*, 18;376 (9758):2086-95.DOI: 10.1016/S0140-6736(10)61508-5

- Periyanayagam D, Natarajan V. (2020). Prevalence of anxiety disorders in patient presenting to cardiology outpatient department. *International Journal of Research and Review*. 7(1): 296-299
- Pfaff J.J., Acres JG and McKelvey R.S. (2001). Training general practitioners to recognise and respond to psychological distress and suicidal ideation in young people. *The medical journal of Australia*, 174(5):222-226. doi: 10.5694/j.1326-5377.2001.tb143241.x.
- Psychcentral.(2018). Symptoms & treatment of mental disorders. Retrieved from <a href="https://psychcentral.com/disorders/">https://psychcentral.com/disorders/</a>
- Raguram, R A. (2002).Traditional community resources for mental health: a report of temple healing from India,325:38. doi: <a href="https://doi.org/10.1136/bmj.325.7354.38">https://doi.org/10.1136/bmj.325.7354.38</a>
- Ralph Jone, J. Harry, et al. (1981). A Curriculum for the Psychiatric Training of Family Physicians. *General Hospital Psychiatry*, 3:3,189-198
- Ramanuj, P.& Ferenchick, E.K. (2019) Depression in primary care: part 1—screening and diagnosis: *BMJ* 2019;365:1794. doi: 10.1136/bmj.1794
- Rees, B. L. (1995). Effect of relaxation with guided imagery on anxiety, depression, and self-esteem in primiparas. *Journal of Holistic Nursing*, 13(3), 255–267.
- Sagar, R., Pattanayak, R.D., Chandrasekaran, R., Chaudhury, P.K., Deswal, B.S., Singh, R.K., Malhotra, S., Nizamie, S.H., Panchal, B.N., Sudhakar, T.P., Trivedi, J.K., Varghese, M., Prasad, J. & Chatterji, S. (2017). Twelve-month prevalence and treatment gap for common mental disorders: Findings from a large-scale epidemiological survey in India. *Indian Journal of Psychiatry*. 59(1): 46–55.
- Scarella TM, Laferton JA, Ahern DK, Fallon BA, Barsky A.(2016). The Relationship of Hypochondriasis to Anxiety, Depressive, and Somatoform Disorders. Psychosomatics. 57(2):200-207. doi:10.1016/j.psym.2015.10.006
- Selim R. Benbadis (2019). Psychogenic non-epileptic seizures, conversion, and somatic symptom disorders. *American Academy of Neurology*, 92:1-2. doi:10.1212/WNL. 00000000000006838
- Shidhaye, R., Murhar, V., Gangale, S., Aldridge, L., Shastri, R., Parikh, R., Shrivastava, R., Damle, S., Raja, T., Nadkarni, A. & Patel, V. (2017). The effect of VISHRAM, a grass-roots community-based mental health programme, on the treatment gap for

- depression in rural communities in India: a population-based study. Lancet Psychiatry 4(2):128-135 doi.org/10.1016/ S2215-0366(16)30424-2
- Simon GE, VonKorff M. Somatization and psychiatric disorder in the NIMH Epidemiologic Catchment Area study. (1991) Am J Psychiatry, 148(11):1494-500. doi: 10.1176/ajp.148.11.1494. PMID: 1928462.
- Singh, O.P., (2018). District Mental Health Program Need to look into strategies in the era of Mental Health Care Act, 2017 and moving beyond Bellary Model. *Indian J Psychiatry*. 2018; 60(2): 163–164
- Srinivasan, K., Mazur, A., Mony, P.K., Whooley, M. & Srinivasan M.L. et al. (2018) *BMC Family Practice*, 19:158 https://doi.org/10.1186/s12875-018-0845-z
- Srinivasan K, Isaacs A, Thomas T, Jayaram G. (2006). Outcomes of common mental disorders in a rural community in South India. *Indian J Social Psych*. 22:110 5.
- Seshadri, S., Jaiganesh, S., Krishanan, N.R., Ganesh, A., Radhakrishnan, S., Kulkarni, S., Wuntakal, D. & Kanchibhotla, D. (2019). Impact of a Low Cost, Non-Pharmacological Yogic Breathing Technique Intervention on General Women's Health in India and UK: A Questionnaire-Based Study. *Journal of Women's Health & Gynecology*. 6: 1-11. http://www.jscholaronline.org/full-text/JWHG/6\_303/Impact-of-a-Low-Cost.php
- Sheth HC, Gandhi Z, Vankar GK.(2012). Anxiety disorders in ancient Indian literature. Indian J Psychiatry, 52(3):289-291.)
- Shoib, S., Ahmad, J., Rashid, A., Shah, H., Mushtaq, R. & Malik, M. (2016). Psychiatric aspects in endocrinolgical disorders: Identifying depressive and anxiety in endocrine patients attending outpatient department A Study from General Hospital in Kashmir (India). *British Journal of Medical Practitioners*, 9; 3
- Sideeq, K., Ayub, T. &Nazir, U. Prevalence of Generalized Anxiety Disorder among the Patients Attending a Peripheral Health Center in Kashmir Valley. *JMSCR*2017; 5 (8): 26478-81https://dx.doi.org/10.18535/jmscr/v5i8.82
- Suzanne Brownhill and Kay Wilhelm, et al.(2002) Detecting Depression in Men: A Matter of Guesswork. *International Journal of Men's Health*, 3:259-280.

- Thai, N. and Nguyen.(2018). Mental health literacy, Mental health literacy: knowledge of depression among undergraduate students in Hanoi, Vietnam. *Int J Ment Health Syst.* 12:19 https://doi.org/10.1186/s13033-018-0195-1
- Trivedi, J. K., & Gupta, P. K. (2010). An overview of Indian research in anxiety disorders. *Indian Journal of Psychiatry*, 52 (Suppl1), S210–S218.doi.org/10.4103/0019-5545.69234
- Van der Molen, H. T., Klaver, A. A. M., & Duyx, M. P. M. A. (2004). Effectiveness of a communication skills training programme for the management of dental anxiety. *British Dental Journal*, 196(2), 101-107.
- Verma, K. K., Goyal Ashok, Bhojak Maneesh, Singhal Ashok, Prakash Om. (2001) Psychiatric morbidity among patients attending cardiac Opd. *Indian journal of psychiatry* 43(4)335-339.
- Verma, M., Grover, S., Tripathy, J.P., Singh, T., Nagaraja, S.B., Kathirvel, S., Singh G., &Nehra, R. (2019). Co-existing Non-communicable Diseases and Mental Illnesses Amongst the Elderly in Punjab, India. *European Endocrinology*. 15(2):106–12
- Vikram, P. & Martin, P. (2001). Ageing and mental health in a developing country: who cares? Qualitative studies from Goa, India. *Psychological Medicine*, 1(31), 29-38.
- Vulić-Prtorić Anita. (2016). Somatic Complaints in Adolescence: Prevalence Patterns Across Gender and Age. *Psychological Topics*, 25 (1) 75-105
- Wayne, K. (2007). Anxiety Disorders: Efficient Screening Is the First Step in Improving Outcomes. *Annals of Internal Medicine*, 146:5
- Wittchen, H.-U., Kessler, R. C., Beesdo, K., Krause, P., Höfler, M., & Hoyer, J.(2002) Generalized anxiety and depression in primary care: prevalence, recognition and management. *The Journal of Clinical Psychiatry*, 63(8), 24-34.
- Wittchen, H.U., Mühlig, S., Beesdo. K. (2003). Mental disorders in primary care. *Dialogues Clin Neurosci*, 5:115-128.
- World Health Organization (2016). The health workforce in India, human resources for health observer Series No. 16, retrieved from https://www.who.int/hrh/resources/1605 8health\_workforce\_India.pdf

Zakroyeva, A. Goldberg, D., Gask, L. & Leese, M.(2008). Training Russian family physicians in mental health skills. *European Journal of General Practice*, 14 (1), 19-22. DOI: 10.1080/13814780701855690.

Zheng F., Duan Y., Li J., Lai L., Zhong Z., Hu M. and Ding S., (2019). Somatic symptoms and their association with anxiety and depression in Chinese patients with cardiac neurosis. *Journal of International Medical Research*, 47(10) 4920–4928 DOI: 10.1177/0300060519869711

Zhong, X., Jin, X., Yan, L., Yang, L., Long, H., Wang, J., ... & Ji, P. (2021). Reliability and validity of General Health Questionnaire-12 in Chinese dental healthcare workers during the COVID-19 pandemic. *Frontiers in psychiatry*, 2420.

### Websites

http://www.mayoclinic.org/about-this-site/welcome

http://web.cortland.edu/andersmd/oper/non.html 18.6.19

https://www.healthline.com/health/biofeedback#longterm-outlook

https://eocinstitute.org/meditation/the-psychology-of-meditation/ 5.7.19

https://www.alleydog.com/glossary/definition.php?term=Hypnosis 5.7.19

https://www.apa.org/topics/hypnosis/

https://www.michaeljemery.com/hypnosis-downloads/psychology/5.7.19

https://www.verywellmind.com/what-is-biofeedback-2794875 on date 24.1.2020

http://www.cyc-net.org/cyc-online/cycol-0303-bibliotheraphy.html

http://www.cyc- net.org/today2001/today010910.html

https://www.simplypsychology.org/maslow.html 23.3.2020

https://www.pinterest.ca/pin/73605775137007234/ 23.3.2020

https://etheses.bham.ac.uk/id/eprint/3557/

# **APPENDICES**

# Appendices I

# Socio-demographic characteristics of General Practitioners

Name o	of Dr					
Age		.Yrs	Sex	Contact No.		
Name o	of Clinic					
City			District.		State	
Qualifi	ication					
	Graduate		Post Graduate			
Experi	ence in Genera	l Practio	ce			
	Less than 5		5 to 10 Yrs	10 to 20	more than 20	
Do you	feel Psycholog	gical or	Mental health <b>p</b>	oroblems are		
	Very common		Common	Rare	Very rare	
Any sp	ecific Training	receive	d in dealing wit	h psychological	or mental health probler	ns?
	Yes		No			
If yes,	when the traini	ng recei	ved?			
	During studies		In C.M.Es	Others		
Do you	treat the patie	nts with	Psychological	problems?		
	Yes	No				
Are yo	u familiar with	followi	ng terms			
	Anxiety	Depre	ession Somat	ic Symptom Disc	orders	
Are yo	u aware of any	diagnos	tic criteria used	l for diagnosis ;		
·	Anxiety	Depre		Somatic Symp	tom Disorders	
	·				om Disorders	
How d	o you treat you	r psycho	ological patients	S?		
With 1	medicines	With p	sychotherapy	With bot	h	
Refer	the natient to sy	<i>i</i> chiatrist	/nevchologist			

Medici	nes commonly	used to treat me	ental health problems	<b>;</b>
	Anxiolytic	Antidepressan	t Antipsychotic	
Any sp	ecific training r	received in treat	ing patients with med	icines.
	Yes	No		
Any sp	ecific training r	received in treat	ing patients with psyc	hotherapy.
	Yes	No		
Any sp	ecific counselir	ng technique use	ed.	
		•	t do you feel about yo nent of psychological	our ability to detect and disorders?
	Not Confident		Slightly Confident	Moderately Confident
	Very Confident		Extremely Confident	
Do you probler	•	pecific training	to identify and manag	ge common psychological
	Yes	No		
				Signature of General Physician with Stamp

# **Appendices II Pre-test form for General Practitioners**

Name of General Practitioner		
Address of General Practitioner	•••••	•••••
•••••	• • • • • • • • • • • • • • • • • • • •	•••••
Patient's Name	patient's dis	ease
OPD No / DatePsychological		
Age & SexNon-psychological		
Qualification		
Urban/Rural	chological;	Anxiety
Socio-economic		Depression
Employment		SSD
Marital StatusMarried. Unmarried		Other
Contact No		
	Signature	of Physician
Investigator's Score;		
CHO 12 C CAR T C NICO C	DUO 15 C	
GHQ-12 Score GAD-7 Score PHQ-9 Score	.PHQ-15 Sca	ore

# **Appendices** III. Post-test form for General Practitioners

Name of General Practitioner		•••••
Address of General Practitioner		•••••
	•••••	• • • • • • • • • • • • • • • • • • • •
Patient's Name	Nature of patient's dis	sease
OPD No / DatePsycholog	gical	
Age & SexNon-psych	ological	
Qualification		
Urban/Rural	If Psychological;	Anxiety
Socio-economic		Depression
Employment		SSD
Marital StatusMarried Unmarried		Other
Contact No		_
General Physician's Score ;		
GHQ-12 ScoreGAD-7 ScorePHQ-8 Scor	e PHQ-15 Scor	e
Signature of General Physician		
Investigator's Score ;		
GHO-12 Score GAD-7 Score PHO-8 Score	PHO-15 Score	

# Appendices IV Form for Psychiatrist / Psychologist / General Practitioner for providing their inputs for development of Brief Psychological Intervention Name of Psychiatrist / Psychologist / General Practitioner ...... Sex.....Contact No. ..... Age .....Yrs Name of Clinic City......State.....State You are hereby requested to give your valuable inputs in each & every aspect by answering the following questions. 1. Which of the following common psychological problems must be covered in training session? Depression \*Somatic Symptom Disorder All the three Anxiety [ 2. What should be the total duration (no. of hours) of the proposed training? 2-4 Hrs. 4-8 Hrs 8-12 Hrs More than 12 Hrs 3. In how many days/ sessions the total training should be divided? 2 Days 1 Day 3 Days 4 Days 4. The training session should be on Daily basis Weekly basis 5. The training session should be on Individual training \ Group training sessions 6. What should be mode of communication during the sessions; English Hindi / Punjabi Mix

\* Somatic symptom disorder is the condition in which the physical pain and symptoms a person feels are related to psychological factors. These symptoms can't be traced to a specific

physical cause or medical condition. In people who have a somatic symptom disorder,				
medical test results are either normal or don't explain the person's symptoms.				
7. Which methodologies to be adopted				
lectures Role-plays Group discussion Video demonstration				
Brainstorming Case studies Games and activities All the above				
8. Anything else which you feel can contribute to develop the training module best, both in				
terms of form and contents.				
Dated Signature with seal				

# $\label{eq:Appendices V} \textbf{ : Form for rating of Brief Psychological Intervention for general practitioners}$

# Rating for the Training Module titled; Brief Psychological Intervention for General Practitioners

Name of the Psychiatrist Dr	
AgeSexConta	act No
Name of Clinic/Hospital	
CityDistrict	State
Respected Dr, you are hereby requested to give your rat mentioned in the attached training module. The rating so range between 1 to 4, as per the detail given below;	
RATING:  1: Absolutely unsuitable, 2: less suitable, 3: Quite sui	table, <b>4:</b> Suitable
Session Topics	P- 01 P-01 P-03 P-04 Aiken's V
Identification the probable psychological symptoms	
<ul> <li>Brief Interview skills for assessing Psychological patients</li> </ul>	14
Model of initial interview	134
• Applying GHQ-12 scale while Interviewing	14
Prioritising the clinical symptoms	
• Rule out organic cause	134
<ul> <li>Recognising mental health problems</li> </ul>	134
<ul> <li>To investigate whether the problem is self inflated, environmental or Biological</li> </ul>	14
Identifying the common mental health problems	
Skill of identifying different type of psychological problem	134

•	Skill of judging the severity of problem	134
•	Criteria of selecting the patients for referral to higher centers	1
Analys	sing the health issues	
•	Understanding and diagnosing Anxiety	1
•	Understanding and diagnosing depression	1
•	Understanding and diagnosing Somatic symptom disorder	134
•	Use of different diagnostic tools—GAD-7, PHQ-9, PHQ-15	134
Interv	entions to Manage identified mental health pro	blems
•	Different techniques of Interventions	1
•	Skills of using Positive Psychological Activity	134
•	Skills of using Applied relaxation	1
•	Skills of using Motivational Interviewing	134
•	Skills of using Generic counseling	1
Monito	oring the outcomes of BPI	
•	Informal interviews with GPs included for intervention	1
•	Informal interviews with GPs excluded from intervention	1
•	Comparison of both the included and excluded groups.	134

Dated

Signature with seal

# Appendices VI: PHQ 12 Scale

In the past four weeks, have you				
encountered any of the following	OFTEN	SOMETIMES	SELDOM	NEVER
situations?				
(a) "Able to Concentrate				
(b) Loss of sleep over worry				
(c) Playing a useful part				
(d) Capable of making decisions				
(e) Felt constantly under strain				
(f) Couldn't overcome difficulties				
(g)Able to enjoy day-to-day activities				
(h) Able to face problems				
(i) Feeling unhappy and depressed				
(j) Losing confidence				
(k) Thinking of self as worthless				
(l) Feeling reasonably happy in				
general."				

# **SCORING GHQ-12**

Positive items	0(always)	3(never)
Negative items	3(always)	0(never)

Threshold score is 4 or more

# Appendices VII: GAD -7 Scale

Over the <u>last 2 weeks,</u> how oft bothered by the following prob		Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious or	on edge	0	1	2	3
2. Not being able to stop or co	ntrol worrying	0	1	2	3
3. Worrying too much about di	fferent things	0	1	2	3
4. Trouble relaxing		0	1	2	3
5. Being so restless that it is ha	ard to sit still	0	1	2	3
6. Becoming easily annoyed or	irritable	0	1	2	3
7. Feeling afraid as if somethin	g awful might happen	0	1	2	3
	Total = (	Add Columr		+ — +	
If you checked off <u>any</u> problem to do your work, take care of th					
	ewhat Ve ficult diffi	,	E	extremely difficult	

# Appendices VIII PHQ 8 Scale

PHQ 8			/
	0	1	2
			More
	Not	Several	than
"Over the last 2 weeks how often have	at all	days	half
			the
you been bothered by the following problems?			days

- $1 \quad \text{Little interest or pleasure in doing things.} \\$
- 2 Feeling down, depressed or hopeless.
- 3 Trouble falling or staying asleep or sleeping too much.
- 4 Feeling tired or having little energy.
- 5 Poor appetite or overeating.
- 6 Feeling bad about yourself or that you are a failure or let yourself or your family down.

  Trouble concentrating on things such as reading
- 7 newspaper or watching T.V.
- 8 Moving or speaking so slowly that other people could have

# **Scoring of PHQ-8:**

SCORING PHQ- 8	
None	0 to 4
Mild	5 to 9
Moderate	10 to 14
Moderate severity	15 to 19
Severity	20 to 24
·	

# Appendices IX PHQ-15 Scale

# **PHQ 15**

"During the past 4 weeks, how much have you 0 1 2
Been bothered by the following symptoms? Not at all A little A lot

- 1. Back pain
- 2. Chest pain
- 3. Constipation, loose bowls (diarrhea)
- 4. Dizziness
- 5. Fainting
- 6. Feeling tired or having low energy
- 7. Feeling your heart pound or race
- 8. Headaches
- 9. Menstrual cramps or other problems with your periods
- 10. Nausea, gas or indigestion
- 11. Pain in your legs, arms or joints
- 12. Pain or problems during sexual intercourse
- 13. Shortness of breath
- 14. Stomach pain
- 15. Trouble sleeping."

# Scoring of PHQ-15:

# Scoring: PHQ-15

0 to 4 No somatic symptom disorder

5 to 9 Mild

10 to 14 Moderate

15 or Higher Severe

# LIST OF PUBLICATION

No. of Publication	Name of Journal	Title of Paper	Published Date	Volume & Issue Number
1	European Journal of Molecular & Clinical Medicine	Diagnostic Overlap of Common Psychological Problems In General Practice	2020	Volume 7, Issue 7
2	Journal of Positive School Psychology	Effectiveness of Brief Psychological Intervention in Managing Common Mental Problems in General Practice	Acceptance letter' is being attached in a separate file.	

# **RESEARCH PAPER 1**

# Diagnostic overlap of common psychological problems in General Practice

Harvinder Pal Singh<sup>1</sup>, Dr Hariom Sharma<sup>1\*</sup>

# **Abstract**

**Introduction**: Determining the prevalence of common psychological problems—Anxiety, Somatic symptom disorder and Depression—in general practice population, investigating their association with psycho-social stressors and determining the diagnostic overlap of above mentioned three disorders are the main aims of this study.

**Methods:** In this cross-sectional study, 132 patients were approached, out of which 100 patients agreed to participate in this study and later on responded to the questionnaire (75.7%).

Anxiety of the sample was assessed with the help of GAD-7 (Generalised Anxiety Disorder 7) whereas assessment of depression was done with Patients Health Questionnaire-8 (PHQ-

<sup>&</sup>lt;sup>1</sup> School of Bussiness and arts, Lovely Professional University, Jalandhar.

<sup>&</sup>lt;sup>1\*</sup> Corresponding Author: e mail; hariom.19739@lpu.co.in

8). Patients Health Questionnaire-15 (PHQ-15) was the scale which was used for somatic symptom disorder.

Results: Of the approached 132 patients, 100 responded to the 12-item General Health Questionnaire (GHQ), with a response rate of 75.7%. Out of these 100 subjects, 63 were males and remaining 37 were females. 12-item General Health Questionnaire (GHQ- 12) was administered to all the patients and 47 out of these 100 patients were identified as probable cases (47%). 44% males (28 out of 63) and 51% females (19 out of 37) were found out to be GHQ positive cases, indicating that they have some psychological problem. Prevalence of anxiety, somatic symptom disorder and depression from the studied sample was 42%, 28% and 22% respectively. Males had more depression (27%) than females (13.5%) in the study. Women were more likely to present with anxiety (46% versus 36.5%) and somatic symptom disorder (35% versus 23.8%) compared to men. Overlapping of these three common psychological problems was the major outcome of this study. Overlapping of anxiety with depression is 17% and anxiety with SSD is 31%. Overlapping of all the three variables is 21%. Only 0.4 % overlapping is found in depression and SSD, indicating anxiety is more commonly associated with Somatic symptom disorder than depression.

**Conclusion:** Somatic symptom disorder and depression was similar in term of their prevalence, but anxiety was noticed to be at higher level in patients at general practice. Anxiety, somatic symptom disorder and depression in the study sample had high degree of coexistence also.

### Introduction

Psychological problems are very much prevalent in general practice but the most common factor which is responsible for the delayed recovery is the failure on the part of general practitioners to recognize and manage the problem. Literature review is supporting this notion and it has already been documented that high degree of psychological disorders exists in general practice (Broers et al.,2006). As the result the health care system as a whole is facing a great burden.

While treating psychological disorders, main focus of attention for any general practitioner is on anxiety and depression only, but somatic symptom disorder, which was earlier known as somatoform disorder, is also has its great presence in general practice. Somatoform disorder's co-morbidity with depression & anxiety is also found to be very high (Maier and Falkai, 1999). Literature review shows that at least  $1/3^{\rm rd}$  of psychological patients with somatoform

disorders do have anxiety and depression along with, whereas depression and anxiety cooccur with one another up to the level of 50% (Henningsen et al., 2003).

High prevalence of anxiety disorder and depression also occurs in the patients having some somatic complaints or in other words it can be said that patients who have depressive disorder and anxiety are having high tendency to develop somatic symptom disorder. It has already been reported about the patients having depression or anxiety that they are likely to complaint about a number of unexplained physical symptoms more than twice than the patients who don't have depression or anxiety (Simon et al.,1999).

Somatic symptom disorder is manifested by a patient with history of multiple somatic complaints to the extent that these complaints continue to have disruption in day-to-day life of the patient. Most of the time only one symptom, generally pain, is being manifested by the patient, but symptom of the patient can be non specific like fatigue. As per DSM V, Somatic symptom disorder is having two standards, criterion A and criterion B, by which we can judge it.

**Criterion A**; In this case patient will have significant disturbance in his day-to-day life from multiple current physical symptoms. Generally symptoms are multiple, but sometime patient can present with only one symptom, which is generally pain. The symptoms can be specific, like some localised pain or non-specific like generalised fatigue.

**Criterion B**; Criterion B can be termed if the symptoms of criterion A have a significant impact on thought, emotion and behavior of the patients.

Somatization disorder patient is having a very characteristic presentation. The patient will present with multiple physical complaints which really make the patient very uncomfortable with unexplained disabilities, (Maier and Falkai,1999). Those patients who are having somatic symptom disorder are difficult to treat and they perform poorly in their day-to-day activities. Multiple studies have been done to prove that depressive disorders have great comorbidity with anxiety and somatic disorders (Rod-riguex et al. (2004).

The interesting observation is that patients high level of illness, chronicity and work and psychosocial functioning impairment are noted in patients having comorbidity than the patients without it. (Kessler et al., 1998). The comorbidity can easily lead to more psychosocial disability, higher risk for suicide, and poor clinical outcome.

A lot of research has already been done in individual psychological disorders, and it is still increasing but a very little work has been done to establish the comorbidity among the individual disorders. The symptoms will increase many folds if the patient of SSD will have depression and anxiety along with it, (Lowe et al., 2008).

The psychiatric problem among patients visiting their GPs has already been reported to vary from 10 to 36% (Murthy et al.,1981) and 27% among OPD patients of general hospital. (Murthy and Wig, 1977). A clinical study of 200 general practitioners of Banglore done by Shamsunder in 1978 published with the observation that 24% doctors found the psychiatric comorbidity in less than 20%, whereas less than 10% comorbidity was observed by 65% of the general practitioners. It simply reflects how much awareness is there among GPs about the mental illnesses.

Not a significant research is performed in India on the prevalence and diagnostic overlapping of Somatic symptom disorder, anxiety and depression. And if we talk about the state of Punjab, very little is known among the general practitioners about the association of somatic symptom disorder, anxiety and depression in their clinical practice. This lack of knowledge results into under diagnosing of psychological disorders by GPs.

In order to look into the prevalence and overlapping of anxiety, Somatic symptom disorder and depression among the patients visiting general practitioners in the state of Punjab, India, the main aim of this study is to determine the presence and to evaluate the overlapping of said three psychological disorders. No significant work has been performed in India regarding the opinions and attitudes of non-psychiatrist medical practitioners towards psychological illness. Having all this at the back of the mind, the present study was planned.

# Methods

Phagwara, a small town in the state of Punjab, India was the area where this study was done. The survey was conducted among patients between the age of 25 and 65 years, in the month of August 2019.

Total 100 patients from two different clinics of the town, were selected randomly. Only those patients who visited the general practitioners for their routine check-ups or for new complaints were approached.

The first step is to identify non-psychological cases. For this the first scale of GHQ- 12 was administered to all the patients. The questionnaire was fully explained before administrating

the same to the patients. The patients who were positive for GHQ 12 were requested to participate in the second phase.

In the second phase which was meant for GHQ Positive Cases only, 3 different scales—GAD-7, PHQ-8 and PHQ-15, to assess Anxiety, Depression and Somatic symptom disorder respectively, was used. Of the approached 132 patients, 100 responded to the GHQ-12 scale, thus having response of 75.7%. As maximum patients were seen to be reluctant for the written consent for one reason or the other, the basic rationale of the study was well explained to patients in order to obtain their verbal consent. The confidentiality was assured to the patients.

The research assistant appointed by the author did one to one interviews with all the patients and continued to complete the questionnaires until he reached the sample size. The assessments for research work were successfully done by a student perusing post graduation in psychology. Patients with accidental trauma, severe psychiatric illness or some other chronic problems or disease which were diagnosed by the general physicians were excluded from this study. Those patients not interested to share personal information or their history about medical problems, were excluded from this study (32 patients). Because of study topic being a sensitive one, some of the patients didn't like to share their identity in association with psychological disorders. The researcher checked all the four questionnaires to calculate the score so that identification of the probable cases can be done easily.

The first administered scale GHQ-12 is having two sections. The section one includes sociodemographic details of patients whereas second section is having General Health Questionnaire (GHQ-12) having 12 items, which helps to identify the probable potential cases. Once the potential cases identified, GAD-7 scale for anxiety, PHQ-8scale for depression and PHQ-15 scale for somatic symptom disorder were used for collecting data.

# **Instruments**

The GHQ scale was developed by Goldberg in 1988 for the identification of those cases which are non-psychotic but psychiatric in nature. Its shortest version, GHQ-12, is mainly concerned with psycho-emotional disturbance.

Anxiety of the patients was assessed with the GAD-7 which is a validated scale, developed by Spitzeret al., in 2006, to analyse generalized anxiety disorders. The response options against GAD-7 items are having a wide range varying from as low as 0 to as high as 21, with four responses 1. 'not at all', 2. 'several days', 3. 'more than half the days' and 4. 'nearly

every day'. These responses were scored as 0 (for 'not at all'), 1(for 'several days;), 2 (for 'more than half the days') and 3 (for 'nearly every day') respectively.

The assessment of depression was done with the help of PHQ 8 scale, which is eight item scale developed in 2002 by Kroenke and Spitzer fpr assessing depression. This eight items scale is having all the items from PHQ 9- scale except one question regarding any attempt of suicide, which is considered as a hidden factor in Indian community.

The questionnaire had four different options and these were scored as 0, 1, 2 and 3 respectively. Somatic symptom disorder was measured using PHQ-15 scale developed by Kroenke et al. in 1998.

All the fifteen symptoms mentioned in PHQ-15 scale are rated with 0,1 and 2, where 0 stand for "not bothered at all", 1 for "bothered a little" and 2 for "bothered a lot". Thus range of the PHQ-15 score varies from 0 to 30.

### **RESULTS:**

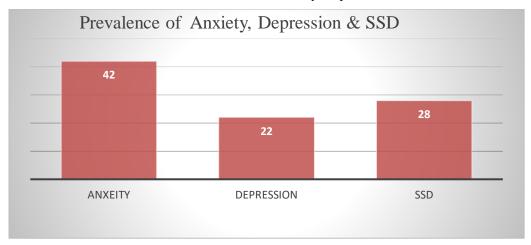
Out of the 132 patients approached, 100 gave their consent for this study (75.7%). Out of these 63 were males and remaining 37 were females. 47 out of hundred patients were identified as probable cases (47%). 44% males (28 out of 63) and 51% females (19out of 37) were found out to be GHQ positive cases, indicating that they have some psychological problem.

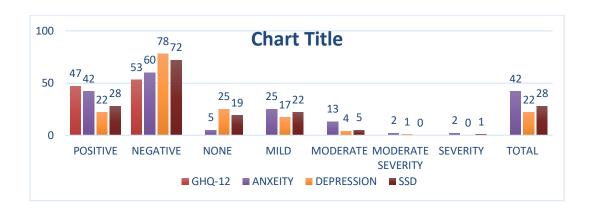
Table 1 Gender \* GHQ-12 Cross tabulation

		GHQ-12		
		Score 0-4 (Negative)	4 Onwards (Positive)	Total
Gender	Male	35	28	63
	Female	18	19	37
Total		53	47	100

Out of 47 GHQ positive cases, 28 were male and 19 females. The prevalence of anxiety, somatic symptom disorder and depression in this studied sample was 42%, 28% and 22% respectively.

Prevalence of Anxiety, Depression and SSD





The detail of the patients having Anxiety is that out of the total 42 anxiety patients, 25 were having mild, 13 moderate and only 4 patients were having severe anxiety. And if we talk about depression, out of the 22 patients having depression, 17 were having mild and 4 had moderate symptoms. Only one patient was having moderately severe depression. There were 28 patients who were having SSD in this study, 22 having mild, 5 having moderate and only one patient was having severe SSD.

Males had more depression (27%) than females (13.5%) in the study. Women were found to present more with anxiety (46% versus 36.5%) and somatic symptom disorder (35% versus 23.8%) compared to men.

Table: Prevalence of Anxiety, Depression and SSD

GENDER	Total sample	Anxiety	Depression	S.S.D.
		N/ (%)	N/ (%)	N/ (%)
Males	63	23	17	15
		(36.5%)	(27%)	(23.8%)
Females	37	17	5	13
		(46%)	(13.5%)	(35%)

Psychological disorders were more frequent with under graduate (UG) and graduate (G) than post graduate individuals (36%, 34% and 29% respectively).

The overlapping of anxiety, depression and somatic symptom disorder (SSD) of the sample (n = 47) is illustrated in Venn diagram (Figure 1).

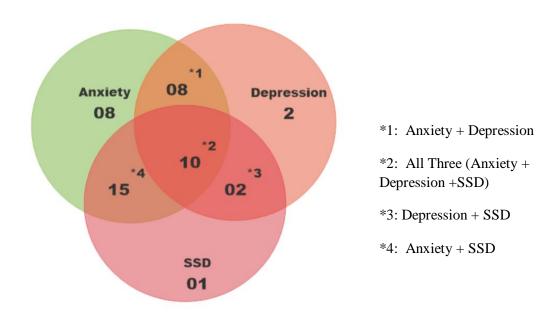


Figure 1: Overlap of Anxiety, Depression and Somatic symptom disorder (SSD) of the identified sample (n = 47): anxiety = 42; depression = 22; somatic symptom disorder = 28. Total number of cases in Venn diagram = 47.

42 patients had anxiety, and out of these 08 patients were having overlapping of depression along with anxiety. 15 patients found to be overlapped with SSD along with anxiety. It means anxiety is more commonly associated with SSD than depression.

Out of the 22 depressed patients, only 2 had overlapping of SSD. It simply signifies that depression is much more associated with anxiety than SSD. Overlapping of anxiety with depression is 17% and anxiety with SSD is 31%. Overlapping of all the three variables is 21%. Only 0.4 % overlapping is found in depression and SSD. Another interesting finding of this study is that total 10 patients are those who were having all the three psychological problems, anxiety, depression and SSD, at the same time.

# **Discussion**

This study reviews comorbidity between anxiety, depression and somatic symptom disorder (SSD) at the general practice level (primary care level) in the state of Punjab. The timely recognition and co-occurrences of these psychological problems is very important because if not recognised or undiagnosed, can create big medical problems in general practice.

Comorbidity of these problems appears to have an important role and as consequence the symptoms of the patients increase many folds. A lot of patients having psychological problems generally visit their family GPs with some somatic complaints. One of the vital issue at general practice level is that patients wants treatment for those physical symptoms which can't be explained medically. The same finding is also resonating in this study. Significant degree of somatic symptom disorder (28%), depression (22%) and anxiety (42%) in patients visiting general practitioners was the main highlight of this study. Although anxiety was more frequently seen but prevalence of somatic symptom disorder and depression found to be similar. A similar percentage of depression (7–19%), somatoform disorders (9–29%) and anxiety disorder (10–25%) was also reported by Spitzer et al., in 1999.

Till date, author has not seen any similar study done in India on overlapping SSD, depression and anxiety, in general practice. Hence, the outcome figures of this study are compared with findings reported in some other developed nations.

It has already been reported by Kroenke in 2007 that somatization, depression and anxiety are the most frequent disorders related to mental health which are seen in primary healthcare.

The pervasiveness of somatoform disorders was also studied by Fink in 1999 and he observed that this psychological disorder was there in general practice up-to the level of 30.3%. This observation was quite similar with the observed value in this study.

Prevalence of three psychological disorders was also different in men and women studied in this sample; anxiety (36.5% versus 46%), depression (27% versus 13.5%), and somatic

symptom disorder (23.8 versus 35%). It simply means that Males had more depression (27%) than females (13.5%) in the study. Women were more likely to present with anxiety (46% versus 36.5%) and somatic symptom disorder (35% versus 23.8%) compared to men.

Gorman in year 2006 has already observed higher incidence of psychological problems among females.

The prevalence psychological disorders in higher ration in this study show that patients had experienced anxiety more than depression and somatic symptom disorder. Thus Anxiety had a much stronger association with somatic symptom disorder than depression.

The current study finding of excessive comorbidity of anxiety with depression (17%) and somatic symptom disorder (31%) is resembling with many other studies which also reported high level of comorbidity among the said three disorders. One of such study was done by Ansseau et al. in year 2004, and another similar study was done by Mergl et al. in 2007.

An important overlap between all the three psychological disorders was clearly visible with the help of a Venn diagram. 10% patients were found to be those who had all the three disorders—anxiety, somatic symptom disorder and depression. Comorbidity of anxiety, depression and SSD was one of the common findings in the previous studies and the present one. The considerable overlapping among three psychological disorders shows that one psychological problem may be a risk factor for another psychological problem. Early diagnosis of psychological problems is a very important key for the improvement of mental health outcomes. Thus this present study explored comorbidity among three major psychological disorders at primary care centers.

# Conclusion

The study done by the author found that anxiety was more common in the patients visiting general practitioners, followed by somatic symptom disorder and depression. A high degree of overlapping of anxiety, depression and somatic symptom disorder was found. An association of higher level between these three psychological disorders in patients was indicated by the data. The prevalence of anxiety was much higher followed by somatic symptom disorder and depression. The overlapping of anxiety with SSD was also much higher than depression was also reported.

# **Competing interests**

The author hereby declares that he has got no competing interests.

# References

Ansseau M., Dierick M., Buntinkx F., et al. (2004) High prevalence of mental disorders in primary care.

J Affect Disord. 78, 49-55.

Bener A., Ghuloum S., Al-Mulla A.A.K., Al-Marri S., Hashim M.S., Elbagi I.-E. (2010a) Prevalence of somatization and psychologisation among patients visiting primary health care centers in the State of Qatar. Libyan J Med. 5, 5266–5273.

Bener A., Kamal A., Fares A., et al. (2004) The prospective study of anxiety, depression and stress on development of hypertension. Arab J Psychiatry. 15,131–136.

Bener A., Ghuloum S., Abou-Saleh M.T. (2011) Prevalence, symptom pattern and comorbidity of anxiety and depressive disorders in primary care in Qatar. Soc Psychiatry Psychiatr Epidemiol. 57(5), 480–486.

Broers T., Hodgetts G., Batic-Mujanovic O., et al. (2006) Prevalence of mental and social disorders in adults attending primary care centers in Bosnia and Herzegovina. Croat Med J. 47, 478–484.

Choudhry R.K., Mishra B.P. (2009) Knowledge and practices of general practitioners regarding psychiatric problems. Industrial Psychiatry Journal; 18(1): 22–26.

Fink P., Sorensen L., Engberg M., et al. (1999) Somatization in primary health care: prevalence, health care utilization, and general practitioner recognition. Psychosomatics. 40, 330–338.

Ghuloum S., Bener A., Abou-Saleh M.T., et al. (2011) Prevalence of mental disorders in adult population attending primary health care setting. J Pak Med Assoc. 61(3), 216–221.

Goldberg D.P., Cooper B., Eastwood M.R., et al. (1970) A standardised psychiatric interview for use in community surveys. Br J Prev Soc Med. 24, 18–23

Klapow J., Kroenke K., Horton T., et al. (2002) Psychological disorders and distress in older and younger samples. Psychosom Med. 64(4), 635–643.

Kroenke K., Spitzer R.L. (2002) The PHQ-9: a new depression diagnostic and severity measure. Psychiatr Ann. 9, 1–7.

Kroenke K., Spitzer R.L., Gruy F.V., et al. (1998) A symptom checklist to screen for somatoform disorders in primary care. Psychosomatics. 39, 263–272.

Kroenke K., Spitzer R.L., Williams J.B., et al. (2007) Anxiety disorders in primary care: prevalence, impairment, comorbidity and detection. Ann Intern Med. 146, 317–325.

Lowe B., Spitzer R.L., Williams J.B., et al. (2008) Depression, anxiety and somatisation in primary care: syndrome overlap and functional impairment. Gen Hosp Psychiatry. 30(3), 191–199.

Maier W., Falkai P. (1999) The epidemiology of comorbidity between depression, anxiety disorders and somatic diseases. Int Clin Psychopharmacol.14(2), S1–S6

Simon G.E., Vonkorff M., Piccinelli M., et al. (1999) An international study of the relation between somatic symptoms and depression. N Engl J Med. 341, 1329–1335.

Spitzer R.L., Kroenke K., Williams J.B., Lowe B. (2006) A brief measure for assessing generalized anxiety disorder: the GAD-7. Arch Intern Med. 166, 1092–1097.

Trivedi, J. K., & Gupta, P. K. (2010). An overview of Indian research in anxiety disorders. Indian Journal of Psychiatry, 52 (Suppl1), S210–S218. http://doi.org/10.4103/0019-5545.69234