

Relationship between Physical and Psychological Health among a group of Patients

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ABSTRACT

Aim: To find a relationship between physical and psychological complaints as reported by patients who are suffering with mental and physical problems. It was concluded that there is a significant relation between physical and psychological wellbeing.

Design: Descriptive, non interventional, cross sectional research design was used to conduct the present study.

Method: In order to collect the data, non-probability purposive sampling strategy was used. The data was collected through physical and psychological health questionnaire, a predesigned questionnaire was filled by observer which included the bio-data, educational and financial status information, their drug history, presenting complaints, complaints pertinent to specific problems, and family history and their psychological complaints were also taken. Total 159 patients of both genders with age range of 14-75 years were interviewed, who were admitted or came on outdoor basis in medical (Fatima Memorial Hospital) and psychiatry (Hameed Latif Hospital) departments.

Results: The results generated by applying SPSS indicated that those patients who presented with physical problems were 79(49.7%) and those presented with psychological health problems were 75(47.2%) and those who were having both psychological and physical problems were 80(50.31%).

Conclusion: It showed that there is a significant relation between physical and psychological problems.

Keywords: Physical health, psychological problems, cross sectional research design

INTRODUCTION

People with diagnosis of severe and enduring mental illnesses are at increased risk for a range of physical illnesses and conditions, including coronary heart disease, diabetes, infections, respiratory diseases and hypertension. Our objective was to find out a correlation between physical and psychological complaints reported by patients. Mental and physical health is fundamentally linked. There are multiple associations between mental health and chronic physical conditions that significantly impact people's quality of life. The world health organization (WHO) defines health as a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity. The WHO states that "there is no health without mental health¹."

People living with a serious mental illness are at higher risk of experiencing a wide range of chronic physical conditions. Conversely, people living with chronic physical health conditions experience depression and anxiety at twice that of the general population². Co-existing mental and physical conditions can diminish quality of life and lead to longer illness duration and worse health outcomes.

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Understanding the links between mind and body is the first step in developing strategies to reduce the incidence of co-existing conditions and support those already living with both. People living with mental illness experience a range of physical symptoms that result both from the illness itself and as a consequence of treatment. Mental illnesses can alter hormonal balances and sleep cycles, while many psychiatric medications have side-effects ranging from weight gain to irregular heart rhythms. These symptoms create an increased vulnerability to a range of physical conditions³.

METHODOLOGY

The study was carried out in two hospitals Fatima Memorial Hospital and Hameed Lateef Hospital, Lahore, Pakistan, over a time period of 6 months from March 2013 to September 2013. An informed consent was obtained from all patients prior to data collection on a predesigned questionnaire. Patient with varied symptoms of medicine and psychiatry were reported at department of medicine and psychiatry. First their symptomatological assessment was done and then on the basis of that the questionnaire was filled. Data regarding demographics, indicating for severity and duration of patient's illness and their family medical and

psychological health was also assessed. The inclusion criteria included patients 14 years and above and were able to give their data after informed consent. The patients reported with physical and psychological illness. Exclusion criteria was patients under 14 years of age, patient not willing to give data or information about themselves and critically ill patients unable to give information about themselves. A descriptive analysis was done to see relation between psychological problems and physical problems; moreover chi-square was used to find out the relation between age groups and gender, between age groups and presenting complaints, between presenting complaints and gender and between presenting complaints and financial status.

RESULTS

There were 159 patients in total. The mean age was 37±12 years. Patient's ages were divided in 6 age groups ranging from minimum of 14 years and maximum of 75 years of age, most of the patients was included in 36-46 years of age range. Sixty four (40.3%) patients were male and 95(59.7%) were females. Relationship between physical and mental health problem was calculated by demographic statistics as shown in table I. It was seen that patients having both physical and psychological problems were 80(50.31%) which showed that there was strong correlation between mental and physical health.

Chi-square statistics was used to see the relation between patient's age groups and gender, age groups and presenting complaints, presenting complaints and gender and presenting complaints, and financial status. It was concluded by result that age groups and gender (p-value=0.119) (see table II), age group and presenting complaints (p-value=0.02) (Table III), and presenting complaints and financial status (Table V) were having significant correlation while presenting complaints and gender (p-value=0.07) (Table IV) were showing insignificant relation.

Table I

Complaints	Frequency	Percent
Physical	79	49.7
Psychological	75	47.2
Both	80	50.1

Table II

Age group (yrs)	Male	Female	Total
14-23	4(6.3%)	13(13.8%)	17(10.8%)
24-33	21(32.8%)	39(41.5%)	60(38%)
34-43	27(42.2%)	22(23.4%)	49(31%)
44-53	5(7.8%)	11(11.7%)	16(10.1%)
54-63	3(4.7%)	8(8.5%)	5(3.2%)
Total	64	94	158

Chi square: 11.72 P value: 0.039

Table III:

Age group (years)	Presenting complaints			Total
	Physical	Psychological	Both	
14-23	12(15.4%)	5(6.7%)	0%	17(10.8%)
24-33	20(25.6%)	38(50.7%)	2(40%)	60(38%)
34-43	17(21.8%)	29(38.7%)	3(60%)	49(31%)
44-53	14(17.9%)	2(2.7%)	0%	16(10.1%)
54-63	10(12.8%)	1(1.3%)	0%	11(7%)
64-73	5(6.4%)	.0%	.0%	5(3.2%)
Total	78	75	5	158

Chi square= 33.55 P value: 0.000

Table IV

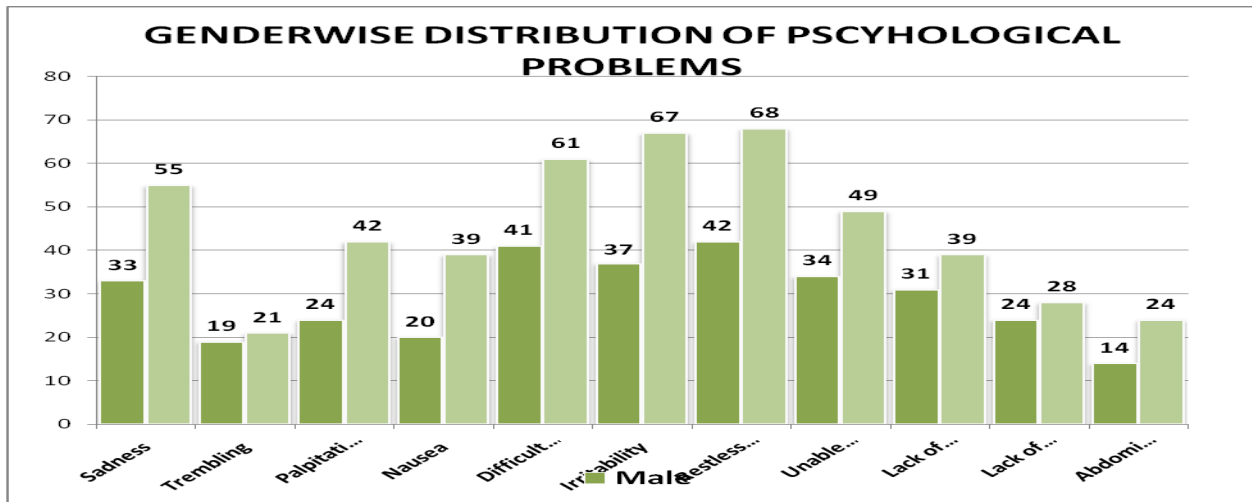
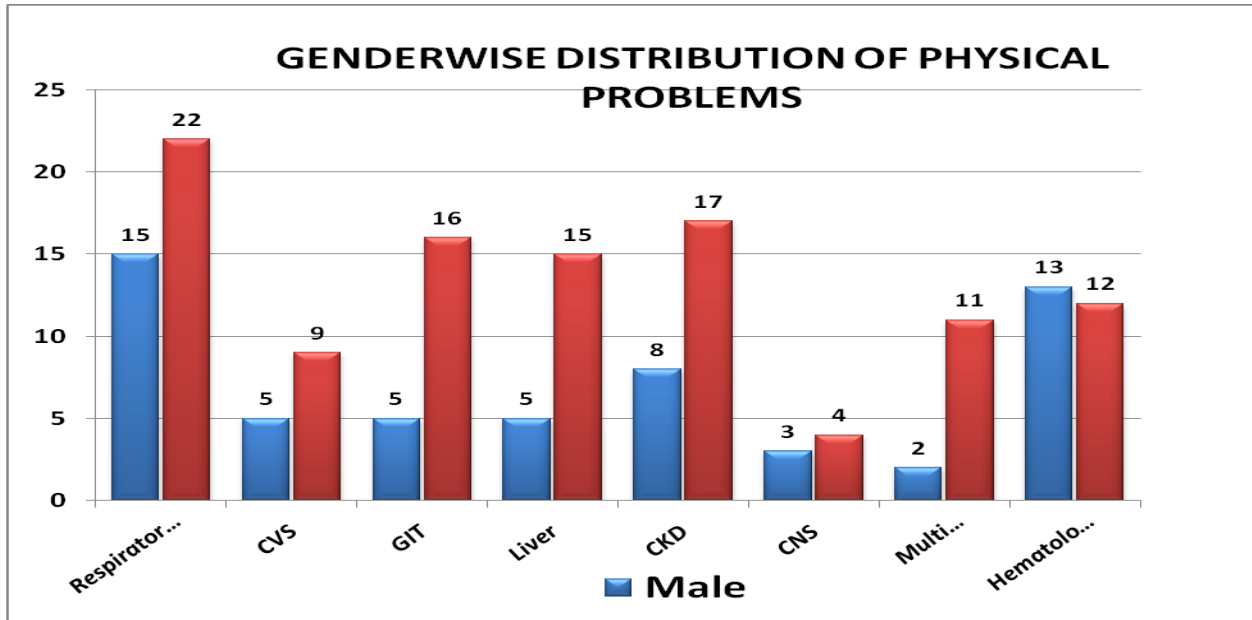
Presenting complaint	Financial status			Total
	Lower	Middle	Upper	
Physical	16(80%)	63(48.5%)	0%	79(49.7%)
Psychological	3(15%)	63(48.5%)	9(100%)	75(47.2%)
Both	1(5%)	4(3.1%)	.0%	5(3.1%)
Total	20	130	9	159

Chi Square=18.473 P value: 0.001

Table V

Presenting complaints	Male	Female	Total
Physical	29(45.3%)	50(52.6%)	79(49.7%)
Psychological	35(54.7%)	40(42.1%)	75(47.2%)
Both	0	5(5.3%)	5(3.1%)
Total	64	95	159

Chi square test=5.06 P value: 0.079



DISCUSSION

People living with mental illnesses often face higher rates of poverty, unemployment, lack of stable housing, and social isolation. These social factors increase the vulnerability of developing chronic physical conditions⁴ In our study as people who are unable to afford healthier food options often experience nutritional deficiencies. Poor nutrition is a significant risk factor for the development of heart disease and diabetes. Similarly, it is more difficult to be physically active when living in an unsafe or unhealthy neighborhood. Mentally disturbance pushes people towards poorer physical condition⁵.

Some chronic physical conditions and stress can lead to high blood sugar levels and disrupt the circulation of blood, which can impact brain function.

People living with chronic physical conditions often experience emotional stress and chronic pain, which are both associated with the development of depression and anxiety. Disability can also cause distress and isolate people from social supports⁶. There was some evidence in our study that the more symptomatic the chronic physical conditions, the more likely that a person will also experience mental health problems. Thus, it is not surprising that people with chronic physical conditions often self-report poor mental health.

Mental and physical illnesses also share many symptoms, such as food cravings and decreased energy levels, which can increase food consumption, decrease physical activity and contribute to weight gain⁷. These factors were also found in this research that increase the risk of developing chronic physical

conditions and can also have a detrimental impact upon an individual's mental well-being.

The social determinants of health can also impact upon a person's mental well-being. People living in poverty with chronic physical conditions are at risk of developing mental health problems and may face barriers to accessing mental health care, contributing to worsening mental health problems. Housing insecurity can be particularly stressful and lead to poorer mental and physical health⁸.

The way that people experience their mental illnesses can increase their susceptibility of developing poor physical health. Mental illness can impact social and cognitive function and decrease energy levels, which can negatively impact the adoption of healthy behaviors⁹. It was undoubtedly seen in our study that people may lack motivation to take care of their health. Or, they may adopt unhealthy eating and sleeping habits, smoking or abuse substances, as a consequence or response to their symptoms, contributing to worse health outcomes.

Diabetes rates are significantly elevated among people with mental illnesses. Both depression and schizophrenia are risk factors for the development of type 2 diabetes due to their impact on the body's resistance to insulin. People with mental illnesses also experience many of the other risk factors for diabetes, such as obesity and high cholesterol levels. Antipsychotic medications have been shown to significantly impact weight gain; obesity rates are up to 3.5 times higher in people with serious mental illnesses in comparison to the general population¹⁰. It was also seen in our results that those people who were taking psychiatric medication developed physical diseases after that. Conversely, people with diabetes have nearly twice the rate of diagnosed mental illnesses as those without diabetes. Forty percent of people with diabetes also exhibit elevated symptoms of anxiety. People living with diabetes often experience significant emotional stress which can negatively affect an individual's mental health¹¹. The biological impact of high blood sugar levels is also associated with the development of depression in people with diabetes. Left untreated, co-existing diabetes, poor mental health and mental illnesses can hinder self-care practices and increase blood sugar levels, contributing to worsening mental and physical health.

CONCLUSION

Clinically significant relationship between mental and physical health was observed in our study. It was analyzed that those people having mental health problems were also having physical ailments at the

same time. With that it was also seen in results there was strong relationship between patient's age groups and gender, age group and presenting complaints and presenting complaints, and financial status.

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