Abstract

The purpose of the study was to unfold the manifestation of psychiatric disorders in local community and to analyse the constellation of psychiatric problems around level of education. The present study is descriptive in nature. The locale of research was Shafique Psychiatric Clinic (SPC) and the study design includes the patients visiting psychiatrist working in the facility. The sample consisted of 400 patients, both convenient and purposive sampling techniques were used for data collection. The data was collected by conducting specialized interviews for the purpose of reaching diagnosis on the bases of ICD-10 and DSM-5. The date was quantitative in nature. The analysis of descriptive results revealed that both genders are equally suffering from neurotic disorders whereas psychotic disorders were more prevalent among male as compared to female population. Interestingly the age range varied for neurotic and psychotic disorders starting from as low as 7 years and as much as 80 years. Most of patients visiting the facility were uneducated thus enforcing the fact that low level of education is an important risk factor for mental health, and should be kept in mind in psychiatric prevention and mental health promotion. The hypothesis testing revealed that level of education was negatively correlated with psychiatric disorders. Education of the masses was concluded as primary intervention for the prevention of psychiatric disorder.

Keywords: Age; Education; Khyber Pakhtoon Khwa; Mental Health; Psychiatric Disorders

Introduction

Mental health is more than the mere lack of mental disorders. World Health Organization [1] defined it as “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” This study would conceptualise mental health as subjective well-being, perceived self-efficacy and autonomy whereby individuals recognize their abilities, are able to cope with the normal stresses of life, work productively and fruitfully, and make a contribution to their communities [2]. The analysis of extinct review of literature revealed that mental health problems affect society as a whole, and not just a small, isolated segment. Mental, physical and social health are closely interwoven and vital strands of life but unfortunately, in most parts of the world, mental health and mental disorders are not accorded anywhere the same importance as physical health [3]. They are therefore a major challenge to global development. Health promotion is the process of enabling people to gain increasing control over their health and improve it, it is therefore related to improving the quality of life and the potential for good health, rather than only an amelioration of symptoms [4].

The present study operationalized common mental disorders as a constellation of mental health conditions that include depression, anxiety, and other related psychotic affective disorders based on DSM-5 classification system [5]. These disorders are classified in ICD-10 as: “neurotic, stress-related and somatoform disorders”, “mood disorders” and “psychotic disorders” [6]. The public health significance of mental and behavioural disorders is demonstrated by the fact that they are among the most important causes of morbidity in primary care settings and produce considerable disability [7,8]. As many as 450 million people suffer from a mental or behavioural disorder and nearly 1 million people
commit suicide every year [9]. Four of the six leading causes of years lived with disability are due to neuropsychiatric disorders i.e., depression, alcohol-use disorders, schizophrenia and bipolar disorder [10]. The Mental Health Global Action Programme is part of a major effort to implement strategies aimed at improving the mental health of populations [1]. Projects are designed within a framework of activities which includes support to countries in monitoring their mental health systems, formulating policies, improving legislation and reorganizing their services [2]. The high prevalence of psychiatric disorders in developing countries is not well understood. It is now recognized that psychiatric disorders in the developing world are a serious public health concern, predicted to become the most common cause of disability by the year 2020 [7]. The reasons for this increased prevalence are not clear and a better understanding of aetiology is necessary if interventions are to be effective [10-12]. Possible explanations include exposure to chronic infectious disease, other physical illness, severe social adversity, especially poverty, poor education and poor access to treatment, complicated, perhaps by cultural beliefs about depressive symptoms [13]. This study aims to replicate the previous finding of a high prevalence of psychiatric disorders in Pakistan and significance of education as primary level intervention strategy [14].

The review of literature revealed that there is significant relationship between the prevalence of common mental disorders and low educational levels [14]. The Bulletin of the WHO has shown that lack of access to resources to improve their situation and low levels of education have been implicated as risk factor for dementia [13]. Higher levels of education may reflect optimal brain development in childhood, which in turn protects from pathological processes that lead to cognitive impairment (or in the case of this review, common mental disorders) in later age [5]. It is not clear whether the higher prevalence of psychiatric disorders in Pakistan can be explained by social factors [15]. A study from Pakistan found association between increased rates of anxiety and depression with relative poverty, with low levels of literacy and; for married women, living in unitary, as opposed to extended families [14]. It was assumed that education enhances self-esteem and autonomy of women, which might be the underlying mechanism for the observed protective effects of increasing levels of education for the risk of psychiatric disorders in the context of elevated stress levels [16]. The present study assumes that psychiatric problems of any community reflect the nature of the crises prevailing in the society. It calls for interventions at personal as well as at societal level. It is our responsibility as mental health professionals to unveil the social problems of the community by understanding the psychiatric issues. We can contribute initially by providing by best possible treatment and then by disseminating our research findings to the relevant policy makers, who can take relevant measures for eradicating underlying social problems. The present study aims to focus on nature of the psychiatric problems prevailing in the community. It would unfold the relationship between education level and nature of psychiatric problems. Furthermore, it described the nature of the treatment provided at the clinic and satisfaction level of the patients reaching out to the facility.

Objective

- To unfold the manifestation of psychiatric problems in local community
- To analyse the constellation of psychiatric problems around level of education.

Material and Methods

The present study is descriptive in nature. The locale of research was Shafique Psychiatric Clinic (SPC), the clinic has been serving the community from decades and patients across the country are coming to seek the treatment. Its services are very popular in the Pakhtoon region of Khyber Pakhtoon Khwa province of Pakistan and even Afghanistan. It’s a co-working place, many psychiatrists and psychologists are working together to provide best possible treatment to the patients reaching out for psychiatric help. The study design includes the patients visiting psychiatrist and the sample consisted of 400 patients. The data was collected by conducting specialized interviews for the purpose of reaching diagnosis on the bases of ICD-10 and DSM-5.

The diagnostic interviews were conducted both by the psychiatrist and the psychologist working there. The data was both quantitative and qualitative in nature and also consisted of basic information of the patients included in the sample. The basic information was gathered by socio-economic census form. The population of the present study was psychiatric community and sampling frame included psychiatric community visiting the clinic. Purposive and convenient sampling techniques were used and unit of analysis was individual. The date was quantitative in nature. The numeric data was analyzed by using IBM SPSS-20 and was presented in the form of frequencies graphs and tables. The inferences were drawn at two levels, first level was descriptive and at second level inferential statistics was used for hypothesis testing.

Results and Discussion

A growing body of cross-cultural evidence indicates that various psychological, social and behavioural factors can protect health and support positive mental health. Such protection facilitates resistance (resilience) to disease, minimizes and delays the emergence of disabilities and promotes more rapid recovery from illness (WHO, 2002). Preventive interventions in schools improve self-esteem, life skills, pro-social behaviour, scholastic performance and the overall climate. Among various psychosocial
factors linked to protection and promotion in adults are secure attachment; an optimistic outlook on life, with a sense of purpose and direction; effective strategies for coping with challenge; perceived control over life outcomes; emotionally rewarding social relationships; expression of positive emotion; and social integration [17-19]. The result of the present study also indicates the same.

**General Characteristics of the Sample**

The following (Table 1) shows the general characteristics of the sample

<table>
<thead>
<tr>
<th>Gender %</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not working</td>
<td>49%</td>
<td>51%</td>
</tr>
<tr>
<td>housewives</td>
<td>38%</td>
<td>35%</td>
</tr>
<tr>
<td>Menial jobs</td>
<td>16.70%</td>
<td>8%</td>
</tr>
<tr>
<td>Govt jobs</td>
<td>8%</td>
<td>2%</td>
</tr>
<tr>
<td>Private jobs</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Professionals</td>
<td>1%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vocation %</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>Illiterate/RNA</td>
<td>school</td>
<td>College</td>
<td>graduate</td>
<td>Post graduate</td>
</tr>
<tr>
<td>Level</td>
<td>77%</td>
<td>6%</td>
<td>6%</td>
<td>8%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Table 1: General characteristics of the sample.

The analysis of the results indicates that 51% of the sample was female and 49% was male. It also indicates that 73% of the sample was contributing to the national income; 38% were not working and 35% were housewives. 16.7% were doing menial jobs, like farming, labor, shop keeping, skilled workers, driving etc whereas 0.5 % of the menial labor worked abroad. Furthermore 8% were engaged in government jobs, including health sector, army officers, FC security guards, police officers, welfare officers and other government servants. 2% of the sample was doing private jobs and businesses whereas as 1 % of the sample included professionals such as doctors, engineers, lawyers etc. It shows that 73 % of the sample was not doing any vocation.

The analysis of the education level clearly indicates that 77% of the population reaching out for psychiatric treatment is illiterate or their record is not available. 6% went to school or are schools going, and 8% were undergrads or graduates; it should be noted that some of them were still students. Education level of 2% of the sample was post-graduate or professionals. It further indicates that 2% of the sample was getting religious education instead of modern education.

**Manifestation of Mental Health Mental Health Problems among Psychiatric Patients**

This section will analyze the constellation psychiatric problems around gender, age and education the following (Table 2) shows the constellation of psychiatric diseases around gender in percentages

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Anxiety</th>
<th>Mood related disorders</th>
<th>Psychosis</th>
<th>Neuro-cog disorders</th>
<th>Neuro-develop disorders</th>
<th>Drug abuse</th>
<th>Somatoform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>50%</td>
<td>45%</td>
<td>68%</td>
<td>35%</td>
<td>50%</td>
<td>100%</td>
<td>14%</td>
</tr>
<tr>
<td>Female</td>
<td>51%</td>
<td>55%</td>
<td>32%</td>
<td>65%</td>
<td>50%</td>
<td>0</td>
<td>86%</td>
</tr>
<tr>
<td>Age ranges</td>
<td>11-80 years</td>
<td>7-80 years</td>
<td>16-60</td>
<td>5-80 years</td>
<td>Few months - 40 years</td>
<td>16-34 years</td>
<td>15 - 50 years</td>
</tr>
</tbody>
</table>

Table 2: Constellations of psychiatric disorders around gender and age ranges.

**Anxiety Disorders**

The analysis of the result shows that among anxiety disorders male and female ratio is approximately equal, simple anxiety, GAD, OCD, depression with anxiety and panic disorders are common among both, whereas headache with anxiety, phobia, death phobia and social anxiety was most common in male.

Whereas mixed anxiety and depression was most common in female. The age range indicate the general spread of patients with anxiety disorders, more specifically patients with simple anxiety ranged from age 11-50 years, mixed anxiety with depression could be seen in the 70 years of old patients, OCD could be seen between age 14-50 years and phobia and panic disorders would be seen in early adolescence to middle adulthood.

**Mood Related Disorders**

The analysis cover spectrum of mood disorders ranging from broader categories to associated features. It could be seen...
that male and female almost equally suffered from mood related disorders. While analyzing the specific mood related disorders 61% females suffered from major depressive episode; depression with headache, agitated depression and insomnia with depression were more common in females. Depression with psychotic features was more common in males, whereas bipolar affective disorders and depression with panic attacks could be found in both genders equally. Major depression could be seen in patient as young as 7 years and as old as 80 years. Depression with psychotic features could be seen in adolescence and early adulthood, whereas bipolar affective disorder could be seen in age as young as 14 years and as old as 60 years, furthermore post partum depression could be seen between the age range of 20-34 years. Agitated depression and insomnia with depression provided a wide range starting from age 24 to 65 years of age. Depression with panic attacks could be seen in late adolescence.

**Psychotic Disorders**

The analysis of the results indicates that more female then male suffered from psychotic disorders. Schizophrenia; particularly with negative signs and symptoms, brief psychosis, schizofreniform, delusional disorder (paranoid type) and paranoid schizophrenia were more common in male then female, male and female ration of post psychotic depression 1:3, whereas hebephrenic schizophrenia and schizo-affective disorders could be seen in both male females equally. Schizoaffective disorders and schizophrenia with its sub types could be seen in age early 16 years and as late as 60 years in the sample. Delusional disorders could be seen more frequently in early adulthood.

**Neuro-cognitive Disorders**

The analysis of the results suggests that more female cases of neuro-cognitive disorders were reported to the facility then male. Epilepsy, headache and dementia with depression were more common in females, whereas other organic conditions, dementia, Parkinson disease, epilepsy with depression could be seen in both genders equally. Furthermore, classical cases of conversion with aphasia and epilepsy with psychotic features and dementia were diagnosed in male patients. Other organic disorders, epilepsy and seizures disorders could be seen in age as early as 5 years, headache could be seen in early and late adulthood, whereas Parkinson disease and dementia in late adulthood and very old age such as 80 years.

**Neuro-developmental Disorders**

These disorders could be seen equally in males and females, although ADHD, ADHD with psychotic features and MR with BAD were more common in females. MR and MR with psychosis was more common in males, male children could be seen more frequently with learning disabilities and behavioral problems. The ratio of co-morbidity of MR and ADHD among male and female patients was almost equal. The reported cases of ADHD and MR (there associated features) could be seen in infant of few month to early adolescence among the sample. One classic case of MR with paranoid schizophrenia was reported in the patient of 30 years of age.

**Drug Abuse**

The table indicates that almost all of the reported cases of drug abuse were male, among those THC abuse and THC induced mood and psychotic disorders were more common. Drug abuse could be seen more frequently between ages 16-34 years.

**Somatoform and Stress Related Disorders**

These disorders could be seen more frequently in females then male. Somatization disorder, acute stress disorders and conversion with depression could be seen in females, where as few cases of conversion in males were also reported. One classical case of body dimorphic disorder was reported in male and PTSD was found in both genders equally. Personality disorders, specifically borderline personality disorder, along with depression were also common in both genders. Cases of conversion and acute stress reaction could be seen as early as 15 years and as late as 45 years. Somatization and body dimorphic disorders were more common in early adulthood and PTSD could be seen in late adolescence.

**Correlation Between Level of Education and Mental Health**

Illiteracy or poor education is a consistent risk factor for common mental disorders [20]. Reverse causality is unlikely to be a factor, since primary education occurs in early childhood when mental disorders are uncommon [11]. The social consequences of poor education are obvious: lack of education represents a diminished opportunity. The following (Table 3) shows the statement of hypothesis; it was hypothesized that lower the level of education the higher are the chances of developing mental health problem. The data was collected periodically by stating the education and diagnosis of the patient reporting to the facility. The analyses would show the comparison between the two variables. Hypothesis: Level of education is negatively correlated with mental health problem.
This table comprehensively describes the hypothesis statement.

Table 3: Correlation level of education and mental health.

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Dependent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub variables/indicators</td>
<td>Sub variables/indicators</td>
</tr>
<tr>
<td>level of education</td>
<td>Mental health</td>
</tr>
<tr>
<td>Illiterate, school level, college level, undergrads, graduates, post grades professionals</td>
<td>Psychiatric disorders, ranging from neurotic to psychotic mental disorder</td>
</tr>
</tbody>
</table>

Statistical test  
Correlation analysis

Table shows an inter relationship b/w two variables i.e. level of education and mental health. The results show negative correlation between the two variables, indicating that increase in one variable can cause decrease in other variable. In other words, level of education is negatively correlated with mental health thus proving the hypothesis. It is also obvious from the results that 77% of the patients reporting to the facility for treatment are illiterate, diagnosed mainly for mood related disorders, secondly for psychosis, thirdly for anxiety disorders, fourthly for neuro-cognitive disorders and finally for somatoform or stress related disorder, as evident in the next (Table 4).

Table 4: Constellations of psychiatric disorders around level of education.

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Anxiety</th>
<th>Mood related disorders</th>
<th>Psychosis</th>
<th>Neuro-cog disorders</th>
<th>Neuro-develop disorders</th>
<th>Drug abuse</th>
<th>Somatoform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>60%</td>
<td>84%</td>
<td>76%</td>
<td>80%</td>
<td>86%</td>
<td>55%</td>
<td>72%</td>
</tr>
<tr>
<td>School</td>
<td>12%</td>
<td>2.90%</td>
<td>1.70%</td>
<td>6.50%</td>
<td>10.00%</td>
<td>22%</td>
<td>10.30%</td>
</tr>
<tr>
<td>College</td>
<td>10%</td>
<td>3.36%</td>
<td>7.60%</td>
<td>5.2</td>
<td>0%</td>
<td>0%</td>
<td>6.80%</td>
</tr>
<tr>
<td>Graduate</td>
<td>12%</td>
<td>7.10%</td>
<td>9.30%</td>
<td>3.90%</td>
<td>0%</td>
<td>23%</td>
<td>6.80%</td>
</tr>
<tr>
<td>Post graduate</td>
<td>2%</td>
<td>1.20%</td>
<td>4.20%</td>
<td>1.30%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Deeni-taleem</td>
<td>1%</td>
<td>0.80%</td>
<td>0.80%</td>
<td>2.60%</td>
<td>4%</td>
<td>0%</td>
<td>3.40%</td>
</tr>
</tbody>
</table>

The table shows the decreasing trend in mental health problems with growing education with few exceptions. In anxiety related disorders it can be seen that majority of the patients reporting anxiety were not educated; those who had school, college or graduate level education also experienced anxiety at some level. Mood related disorders including BAD were highly common among illiterate population, although they could be seen at other levels of education, they were reported by 7% of the patients at graduate level. Psychosis was highly reported by less educated patients, but interestingly trends of psychosis could also be seen at college, graduate, post graduate and professional level, for the causes unknown. Neuro-cognitive and developmental disorders were also mainly reported by illiterate population, whereas drug abuse was more common in less educated people, college and university students. Somatoform (especially conversion disorder) disorders showed decreasing trend with higher level of education. Multivariate analysis of one of the studies indicated that severe financial and housing difficulties, large number of children and low educational level were particularly closely associated with depression (Husain, Creed and Tomenson, 2000). It can be concluded that in spite of awareness and availability of mental health facility more illiterate population approached clinic as compared to moderately and highly educated population. Thus hypothesis
• $H_1$: “level of education is negatively correlated with mental health problem” is accepted.

The review of literature also enforces the fact that low level of education can increase the chances of developing mental health problems. There are various mechanisms which might explain the association between poor mental health and low education. Firstly, the children and adolescents with poor mental health, or with increased vulnerability because of individual and/or environmental factors, will be less able to complete higher education. Secondly, low educational level could be associated with a low sense of mastery, which could be a stressor in itself, or indirectly influence mental health through other psychosocial variables, like social support [17-19]. Sense of mastery can also be considered as a strong mediating variable between level of education and psychological distress, whereas the other variables played a minor role when adjusting for sense of mastery [10]. Higher education level brings a sense of mastery which directly affect self esteem [16].

Conclusion

The analysis of the results revealed manifestation of psychiatric disorder in local community. It revealed that both genders are equally suffering from neurotic disorders whereas psychotic disorders were more prevalent in males as compared to female population. Interestingly the age range varied for neurotic and psychotic disorders starting from as low as 7 years and as much as 80 years. Most of patients visiting the facility were uneducated thus enforcing the fact that low level of education is an important risk factor for mental health, and should be kept in mind in psychiatric prevention and mental health promotion. Therefore, the Education of the masses can be concluded as a primary intervention for the prevention of psychiatric disorder. School should not only be a place for teaching of theoretical and practical skills, but should also contribute to psychological growth, with the strengthening of coping and mastery as important elements.

References

9. Mental Health Action plan 2013-2020