

Psychological Dimensions in Patients admitted in Imam Khomeini General Hospital in Tehran

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Objectives: The aim of this study was to assess the mental health of patients admitted in Internal medicine, Surgery and Gynecology wards of Imam Khomeini Hospital of Tehran in 2009.

Method: The symptom checklist-90-R (SCL-90-R) questionnaire was administered for 93 patients in internal, surgical and gynecological wards of Imam Khomeini hospital in 2009.

Result: In this study, the mean age was (32.89 ± 12.69) with a range of 14 to 70 years old. 42 patients (44.7%) were male and 52 (59.6%) were female ; 56 patients (59.6%) were married and 37 (40.4%) were single.

There is a significant relationship between gender & marital status (P<0.04). According to cut of point of Global Severity Index (GSI) which was reported in a study (0.7), 58.1 percent of the patients have different levels of psychiatric problems (GSI>0.7). In psychiatric symptoms, somatization has the highest prevalence (90.5%) ,and depression (77.9%) and anxiety (71.6%) have a higher prevalence than other symptoms among patients who suffer from psychiatric problems.

Conclusion: According to the result of the current study, there is a high prevalence of psychiatric problems among the admitted patients in Internal medicine, Surgery and Gynecology wards of a general hospital according to SCL-90-R questionnaire. This study advises that more attention be given to mental health in general hospitals.

Keywords: *General hospital, Mental health, Psychiatry,*

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There are concurrence and interaction between psychiatric problems and medical diseases. In some cases, psychiatric disorders can elicit somatic symptoms ; likewise, the medical diseases can have psychiatric consequences and result in psychological complications (1).

Different studies indicate that there are significant numbers of patients with psychiatric disorders who are hospitalized in general hospitals due to non psychological complaints (2).

Significant numbers of studies show that in contrast to physicians' beliefs, most of the patients who are assumed to just be worried at the arrival, commonly suffer from anxiety and depression (3). According to different studies, the most common psychiatric disorder in patients who are hospitalized in emergency wards is anxiety ,while patients admitted in wards mostly suffer from depression (2). In addition, several disorders especially the chronic ones, will result in psychiatric problems due to their distressing experience and side effects (4).

According to studies in general hospitals, there is a 30% to 60% prevalence of psychiatric disorders in hospitalized patients (2) ,while some other studies indicate that one quarter (25%) of patients in medical wards have a kind of psychiatric disorders. Studies

indicate that most women suffer from behavioral problems. Further, they claim that there is a high prevalence of psychosomatic disorders in elderly patients while most of the young men experience problems due to alcoholism.

In outpatients services ,there is a prevalence of about 15% of psychiatric problems in cases who have at least a kind of specific psychiatric disorder (5). In cases without any specific psychiatric diagnosis, the prevalence of different kind of psychological complications has been estimated to be 40 % (1-8) .

According to some studies, the prevalence of psychiatric disorders in general Iranian population is 21 % (9). Besides the interactions between somatic and psychiatric disorders , there are some documented relationship between special disorders that cause staffs in medical wards to struggle with psychological problems of their patients, and this has mainly been observed in major wards of general hospitals (7).

Material and Methods

After explaining the research objectives and obtaining informed consent, the participants completed the anonymous demographic and SCL-90-R

Table 1. Cut off points of SCL-90-R according to Iranian norm and version

Cut off Points	Healthy	Borderline	Sick	Extremely sick
Somatization	0-3.5	3.5-11.5	11.5-20.5	20.5-48
Depression	0-6.5	6.5-15.5	15.5-34.5	34.5-52
Anxiety	0-4.5	4.5-10.5	10.5-25.5	25.5-40
Interpersonal sensitivity	0-6.5	6.5-15.5	15.5-26.5	26.5-36
Hostility	0-2.5	2.5-7.5	7.5-16.5	16.5-24
OCD	0-7	8-11	12-26	27-40
Phobia	0-4	5-12	12-20	21-28
Paranoid thoughts	0-7	8-13	14-19	20-24
Schizophrenia	0-3	4-6	7-23	24-40
Others	0-2	3-6	7-17	18-28

Those patients during 48 hours before and after surgery or those who underwent cesarean section were excluded from the study. Age less than 14 and more than 70 was considered an exclusion criterion in this study.

Correlation analyses were undertaken to determine the relationship between clinical and demographic factors. For predictor and outcome variables, descriptive statistics and one way ANOVA were computed.

This research is a cross-sectional study with a sample of 93 patients admitted in Internal medicine, Surgery and Gynecology wards of Imam Khomeini hospital in Tehran, using SCL-90-R and demographic questionnaires.

The SCL-90-R is a widely used and validated self-report questionnaire that has been designed to reflect the psychological symptoms observed in psychiatric and medical patients (10).

The respondents rate the 90 symptoms of distress on a 5- point likert- scale (0= "not at all" to 4= "extremely") to measure the extent of symptoms, which they have experienced during the last 7 days. The items are divided into 9 subscales: Somatization, Obsessive – Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid and Psychoticism. In SCL-90-R, higher scores indicate greater distress in psychological aspects. SCL-90-R also has three global indexes: the Global Severity Index (GSI) assesses the extent or depth of the individual psychiatric disturbance; the Positive Symptom Total (PST) counts the number of questions

rated above the cut off point; and the Positive Symptom Distress Index (PSDI) represents the intensity of symptoms. The Iranian version of SCL-90-R has been validated in several studies in different community samples in Iran. In 1995, Bagheri and his colleges estimated the validity of about 97% and sensitivity ,specificity and reliability of 94%, 98% and 96 % respectively (11).

Results

In this study, the mean age was (32.89 ± 12.69) with a range of 14 to 70 years old. 42 patients (44.7%) were male and 52 (59.6%) were female. 56 patients (59.6%) were married and 37 (40.4%) were single.

The shortest admission duration was 1 day and the longest was 75 days (Mean=7 ±15.09).

The highest Global Severity Index (GSI) was 2.88 and the lowest was 0.1. (Mean=0.77±0.38).

The relationship between GSI and hospital wards (P= 0.59), age (P=0.17), duration of admission (P=0.76), number of children (P= 0.43) and time of clinical presentation before admission wasn't statistically significant. GSI in females was significantly higher than in males (P=0.034).

Based on the cut of point of GSI which was reported in a study (0.7) (12), 41.9% of patients were healthy (GSI<0.7) and others (58.1%) had different levels of disorders (GSI>0.7).

In psychiatric symptoms' subscales, somatization had the highest prevalence (90.5%), and depression (77.9%) and anxiety (71.6%) had a higher prevalence than other symptoms. Paranoid thoughts had the lowest prevalence (28.4%).

Anxiety score in females (Median=11.76 and SD=8.85) is significantly higher than in males (Median=7.67&SD=5.34)(p-value=0.007).

Phobia score in females (Median=4.53 and SD=4.45) is significantly higher than in males (Median=2.83&SD=3.13)(p-value=0.034).

Phobia score is significantly higher in patients who live out of the capital than in the patients who live in the capital (Median=4.81 & SD=4.01) (Median=3.11 & SD=4.31)(p-value=0.05).

Paranoid thoughts have a significant relationship with

Table2. Frequency and percent of psychological dimensions in Surgery, Internal medicine and Gynecology wards of Imam Khomeini hospital of Tehran.

Symptoms	Healthy	Unhealthy
	Number(Percent)	Number(Percent)
Somatization	9 (9.5%)	84 (90.5%)
Depression	21 (22.1%)	72 (77.9%)
Anxiety	27 (28.4%)	66 (71.6%)
Interpersonal sensitivity	51 (53.7%)	42 (46.3%)
Hostility	42 (44.2%)	51 (55.8%)
OCD	56 (58.9%)	37 (41.1%)
Phobia	66 (69.5%)	27 (30.5%)
Paranoid thoughts	68 (71.6%)	25 (28.4%)
Schizophrenia	42 (44.2%)	51 (55.8%)
Others	7 (7.4%)	86 (92.6%)

out of the capital than in the patients who live in the capital (Median=4.81 & SD=4.01) (Median=3.11 & SD=4.31)(p-value=0.05).

Paranoid thoughts have a significant relationship with the type of ward. Surgery ward has the highest score (Median=8.06 & SD=4.36) and Gynecology ward has the lowest score (Median=2.12 & SD=2.35)(p-value=0.027).

Depression score (Median=16.53 and SD=11.78) is significantly higher in the single group than in the married group (Median=13.59 & SD=9.68) (p-value=0.009).

Phobia score (Median=4.25 and SD=3.85) is significantly higher in the single group than in the married group (Median=3.11 & SD=3.82) (p-value=0.028).

Paranoid thoughts score (Median=5.94 and SD=4.5) is significantly higher in the single group than in the married group (Median=4.54 & SD=3.93) (p-value=0.034).

GSI is not significantly related with living status and educational level in this research.

Discussion

In our study, the relationship between gender& marital status was statistically meaningful (P<0.04). The most frequent symptoms were depression (77.9%) and anxiety (71.6%).

Mental disorders have a high prevalence in communities and this is of importance for governments economically. In addition, most physical disorders which are usually chronic and disabling, can have an overlap with mental disorders (3-8, 10, 12-16).

Providing sufficient support for admitted patients is expensive for governmental systems ;and mental disorders in admitted patients can make it most expensive (9). On the other hand , poor quality of life can influence the patients' emotional and economical state (9). Physicians who visit patients for the first time have a very important role. When they diagnose psychological symptoms through somatic complications, they should refer the patients to secondary and professional centers (15).

In Noorbala's research that was done in Tehran using GHQ-28 as a screening instrument and psychiatric interview based on DSM IV criteria by a psychiatrist for people older than 15 years, reported 21.5% prevalence of mental disorders. The research indicated that mood disorders (9.8%), anxiety disorders (7.4%),and general anxiety disorder (3%) were higher than other psychiatric disorders (17).

In this research, according to the GSI cut off point (0.7), 58.1% of the patients had different levels of mental problems. In comparison to normal population, there was a higher rate of psychiatric problems and probably this difference is due to the interaction between somatic and psychiatric disorders that is supported by the results of all the mentioned studies (1-8, 10, 12-16, 18). The studies conducted from 1963 to

1972 in Iran report a prevalence of between 11.9% to 18.6 % for mental disorders (9).

In this research, mental symptoms especially depression, phobia and paranoid thoughts in singles were significantly higher than in married samples. This result also is supported by previous results and can be assessed by conducting more research (19).

In this research, somatization, depression and anxiety had the most prevalence among other symptoms which were assessed through SCL-90-R. This finding is supported by the results of previous researches; for example, Marchesi's research conducted in Italy, demonstrates that the most frequent symptoms were anxiety disorders in patients at the emergency department (18.1%) and depressive symptoms in patients at medical department (21%) (2). In other research, a hospital-based cross-sectional study done by Fu CW was carried out in four major cities of China which showed that depression and anxiety were the most prevalent problems (13).

In our research, the prevalence of mental disorders in female samples was significantly higher than in males and most previous results support these findings. In Torkamani's research, the prevalence of mental symptoms was significantly higher in the female group than in the male group in the internal ward of Kashani hospital in Shahrekord (8). In another research in Zahedan, a higher prevalence of mental disorders was observed in female patients who underwent hemodialysis in Khatamolanbia hospital (4).

In this research, mental health was not significantly related to age. However, this relationship was significant in the previous studies like Torkamani's research which reported a significant relationship between age and mental health (8). In our research, exclusion of the age criterion can explain this finding. On the other hand, in our study, some of older patients were not interested to answer the questionnaire.

In our study, mental health wasn't significantly related to educational level. On the other hand, other studies like Torkamani's research report a significant relationship between mental health and educational level in normal population. Patients who were educated at higher levels were rare in our study , and educational level of most patients in Imam Khomeini hospital was lower than the normal population.

Based on the high prevalence of mental abnormalities in Imam Khomeini hospital as a great general hospital, this study advises physicians in disciplines other than psychiatry to notice on diagnosing and treating these psychiatric problems in a short time after presentation. This treatment may need consultation liaison psychiatry service to consult or admit some of these patients (18). Consultation with a psychiatrist is very important for patients' present signs and symptoms of mental disorders. This will be effective for the treatment process in these patients (6-8, 14-16).

However, this was a cross-sectional research with no intervention and this was a limitation for this research. In this research, the evaluation of effective factors on

mental health and psychological dimensions was impossible.

Conclusion

According to the result of the current study, there is a high prevalence of psychiatric problems among the admitted patients in Internal medicine, Surgery and Gynecology wards of a general hospital according to SCL-90-R questionnaire. Somatization has the highest prevalence (90.5%) and depression (77.9%) and anxiety (71.6%) have a higher prevalence than other symptoms among the patients who suffer from psychiatric problems. This study advises physician more attention to mental health in general hospitals and consultation with a psychiatrist if patients report symptoms and signs of mental disorders. Additionally existence of a psychosomatic service can improve the mental status of admitted patients.

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