

Mental Health Assessment in Hospitalised Patients in the Department of General Surgery

Suryadevara Yasaswi Sahaja¹, Arun Chandran Ramachandran²

¹Intern, PharmD, Acharya and BM Reddy college of Pharmacy, Bengaluru

²Assistant Professor, Acharya and BM Reddy college of Pharmacy, Bengaluru

Abstract

Mental health is “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community. The goal of the study was to describe the mental health status in hospitalized patients in general surgery department. An educational observational study was carried out among 50 samples in the Department of General surgery, ESI PGIMSR, and Rajajinagar. The data was collected by using global mental health assessment tool questionnaire (GMHAT). All information's were processed and analyzed by using Microsoft excel. From the department of general surgery, the number of patients included from the male ward was 30; the majority of patients were from the age group of 46-55 (33.33%), with a mean age of 47.63 ± 12.18 years. In the female ward, the number of patients included was 20; the majority of patients were from the age group of 46-55 (30%), with a mean age of 51.75 ± 13.36 years. Based on the gender, the majority of patients were male, with 30 (60%) and the minority of them were females, 20 (40%). Compared to all the mental health diseases majority of the people said that thought disorders and psychotic symptoms as none and majority of the people said that do not have any severity. In this study, mental health almost all of the patients had responded as mild to moderate and for the severity they have responded very low. Out of 50 patients using Mann-Whitney U test, the p-value was found to be less than significant level. So, there is a significant difference in between gender and anxiety levels. And also, there was a significant difference in between the gender and panic attack levels using same statistical analysis.

Keywords: Mental Health, Sychotic Symptoms, Male, Panic Attack, Surgery.

1. Introduction

According to the World Health Organization (WHO), mental health is “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community”⁽¹⁾ Positive emotions and effective functioning are included in the WHO definition's essential components of mental health. Three aspects of mental health are listed by Keyes that is emotional well-being, psychological well-being, and social well-being. Happiness, interest in life, and satisfaction are examples of emotional well-being; liking most of one's own personality, being adept at handling daily obligations, having good relationships with others, and being content with one's own life are examples of psychological well-being; positive functioning is referred to as social well-being and includes having something to contribute to society (social contribution), feeling a part of a community (social integration), and feeling believing that society is becoming a

better place for all people (social actualization), and that the way society works makes sense to them (social coherence).⁽²⁾ The ability to form and maintain affectionate relationships with others, to participate in the social roles typically played in their culture, to manage change, recognize, acknowledge, and communicate positive actions and thoughts, as well as to manage emotions like sadness, are all indications of a person's mental health. A person's mental health offers them a sense of self-worth, control, and comprehension of how their body and mind work. According to the Society for Health Education and Promotion Specialists (SHEPS, 1997), maintaining good mental health also entails having positive feelings toward oneself and other people, as well as being content, happy, and loving. Environmental, social, psychological, and biological factors can have an impact on mental health, just like they can with mental illness. The social universe is all around the person who is at the center of functioning.⁽²⁾ Mental health includes internal factors such as a lack of emotional resilience, poor self-esteem and social status, feeling trapped and helpless, and problems associated with sexuality or sexual orientation, isolation and poor integration. External factors have been described as poor social conditions i.e. housing, poverty, unemployment, discrimination or abuse, cultural conflict, stigma and poor autonomy, etc.⁽²⁾

The evidence regarding the impacts of physical fitness training on mood, self-concept, and work behavior is less apparent; nevertheless, it does seem to support cognitive performance during and after physical stress. Personality qualities are unaffected by increases in physical fitness, with the exception of self-concept. Children with mental retardation show psychological improvement after physical fitness training, but no conclusions can be drawn about how physical fitness training affects other clinical disorders.⁽³⁾ Developing a mental health disorder may increase if you have a chronic illness like cancer, heart disease, or diabetes. It is typical to experience sadness or discouragement following a heart attack, after learning one has cancer or when attempting to control a chronic disease like pain.⁽³⁾

Ability to function in daily life and to take pleasure in family, friends, job, and leisure is affected by depression. Depression is a significant medical disorder with various symptoms, including physical ones. As a result, its impacts on health extend beyond mood.⁽³⁾

Individuals 65 and older with depression were less likely to report any mental health consultation than middle-aged adults with depression, and they were especially unlikely to report consulting with professionals other than a family doctor. The factors including gender, marital status, years of education, depressive caseness, and number of chronic medical diseases, age continued to be a significant predictor of the use of mental health services. Although depression is less common in older age groups, the current studies says that there is strong evidence that older age groups are having depression.

This experience of hospitalization has different psychosocial impacts, including nervousness, despondency, and future uncertainty and may worsen patients' emotional reactions and adversely affect their mental wellbeing.^(4,5)

The stress reported that cognitive decline dramatically increases after a hospital stay for mental and emotional health. After the stay, recovery may be more difficult because to the stress and disengagement brought on by the medical environment and a change in routine. The prolonged hospital stays are more unpleasant and harmful for senior patients. Clinical practitioners must be aware of how hospitalization impacts patients' immediate and personal states. Medical professionals must examine and identify how hospitalization impacts patients' emotional states and mental well-being as adults in order to support patients during these difficult times and hence evaluate how hospitalization affects patients' mental and emotional health.⁽⁶⁾

2. Purpose of the study

To describe the mental health status in hospitalized patients in general surgery department

3. Material and Methods

This was an observational study. The study is carried out for a period of 6 months. The study was conducted at ESI PGIMSR, Rajajinagar, Bangalore. It is a teaching hospital providing health care services in different specialties. This study was conducted on in-patients of the General Surgery department of the hospital. A total of 50 subjects fulfilling the inclusion and exclusion criteria were included in the study.

Inclusion criteria:

- A. Patients above 18 years of age and who gave consent.
- B. Patients who are admitted more than one week.

Exclusion criteria:

- A. Patient who has not given consent.

4. Statistical analysis:

All recorded data were entered and analyzed using MS Excel for determining for the statistically significant. Descriptive statistics were computed for quantitative variables and frequencies and percentages were calculated for categorical values. Column charts, pie-charts, bar graphs were made to find the nature of data distribution Mann-whitney U test was applied to the data to find the association between the panic attack and gender, anxiety and gender of the subjects.

5. Results:

The study was conducted in the department of general surgery, ESI hospital, Rajajinagar, Bengaluru, during the year 2023 for a period of 3 months. A total of 50 patients who satisfied the inclusion and exclusion criteria were included in the study.

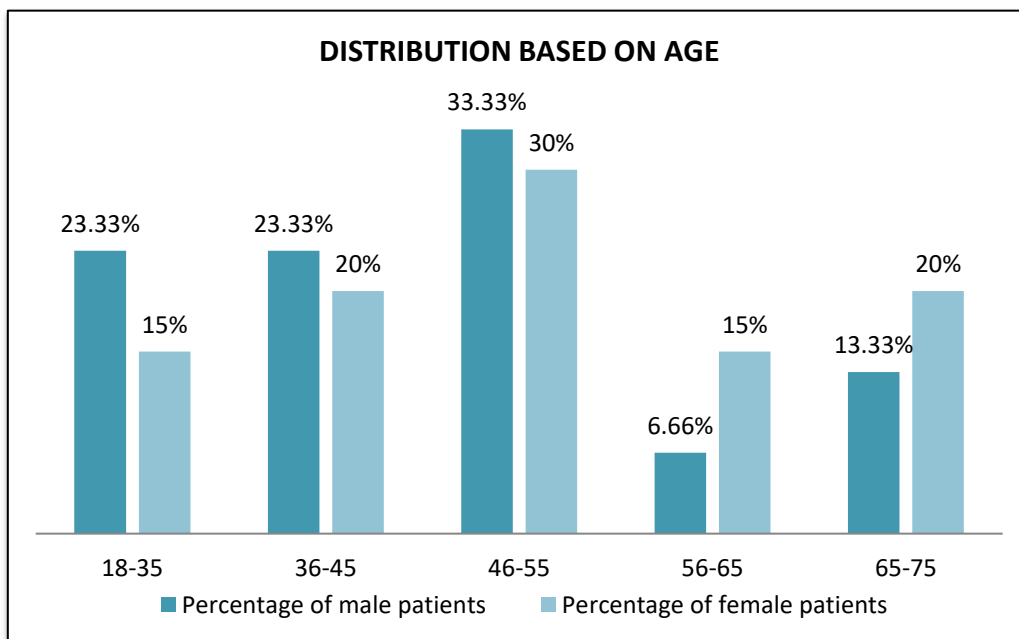


Figure 2: Distribution of patients based on age

Age-frequency	Male Patients	Percentage (%)	Female Patients	Percentage (%)	Total Patients	Percentage (%)
18-35	7	23.33	3	15	10	20
36-45	7	23.33	4	20	11	22
46-55	10	33.33	6	30	16	32
56-65	2	6.66	3	15	5	10
65-75	4	13.33	4	20	8	16

Table 1: Distribution of patients based on age

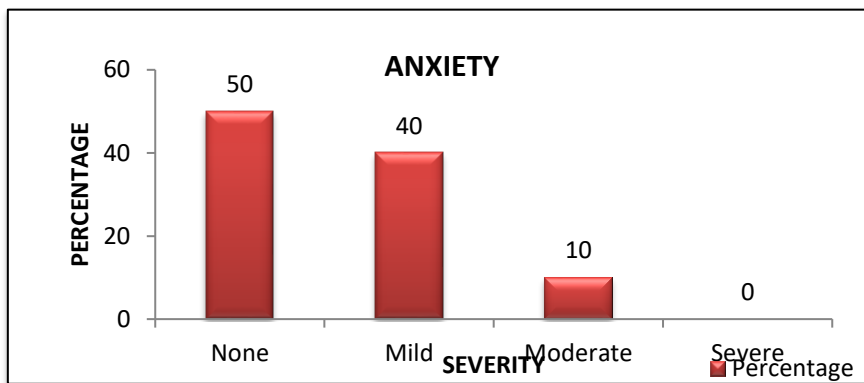


Figure 5: Distribution of patients based on anxiety

Severity	Number of patients	Percentage
None	25	50
Mild	20	40
Moderate	5	10
Severe	0	0

Table 4: Distribution of patients based on anxiety

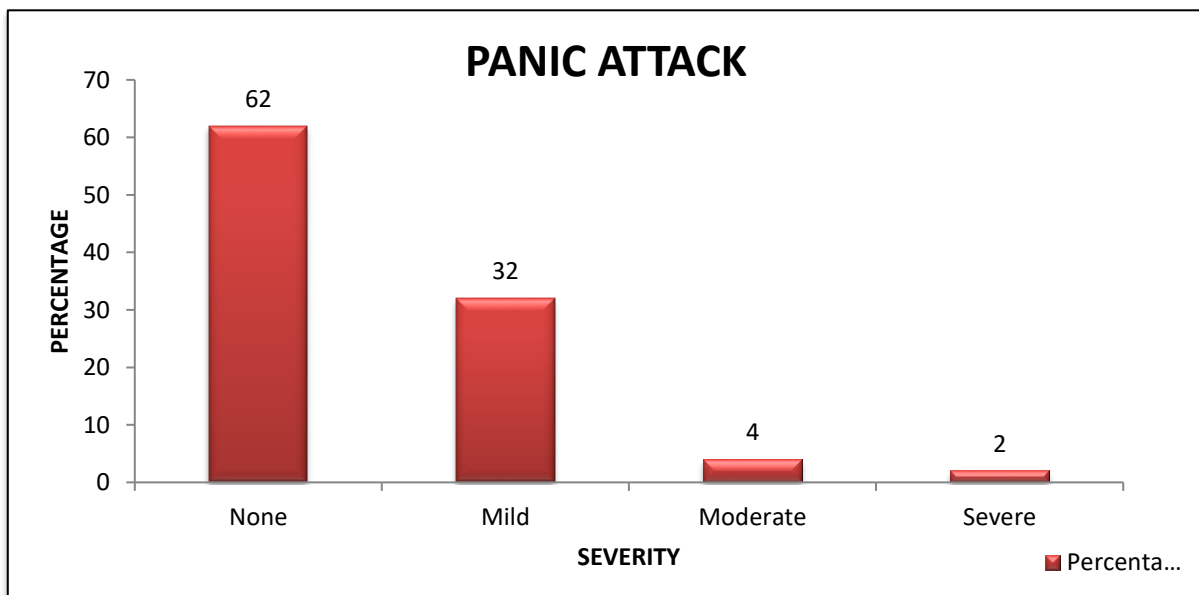


Figure 6: Distribution of patients based on panic attack

Severity	Number of patients	Percentage
None	31	62
Mild	16	32
Moderate	2	4
Severe	1	2

Table 5: Distribution of patients based on panic attack

Association between gender and anxiety:

Out of 50 patients using Mann-Whitney U test, the p-value was found to be 0.042 (<0.005). So, there is a significant difference in between gender and anxiety levels.

Association between gender and panic attack:

Out of 50 patients using Mann-Whitney U test, the p-value was found to be 0.001 (<0.005). So, there is a significant difference in between the gender and panic attack levels.

6. Discussion:

This study was a 6 month long prospective, observational study that was conducted in the department of general surgery of a teaching hospital in Bengaluru. The study was conducted to describe the mental health in the hospitalized patients in the department of general surgery. Based on inclusion and exclusion criteria, a total of 50 patients were included in this study. Based on the distribution of patients by age, from the department of general surgery, In the male ward the majority of the male patients belong to the age of 46-55 with 33.33% . In the female ward the majority of female patients belong to the age group of 46-55 with 30%. Gender-wise distribution was carried out, where, in the department of general surgery, out of 50 patients, 30 (60%) were male and 20 (40%) were female. The distribution of patients from the department of general surgery is similar to **Basak F et al., (2015)**, where the prospective cohort study of 200 patients results found that female patients, patients older than **35 years**, patients with low socioeconomic status and low education level had a relatively higher risk of anxiety and patients with low education and a hospital stay greater than seven days were at risk of depression. It also identified that presence of anxiety was shown to be strongly predictive for depression. In the department of general surgery, the majority of patients' length of stay from both male and female wards was in the range of 2-6 days with 58.05% and 56.09% respectively. The minimum length of stay was 2 days and the maximum length of stay was 31 days According to the study worries, panic attack, hopelessness , sleep ,hypochondriasis, thought disorder in this slight severity is seen and most of the patients were either having no issues or they were having mild to moderate .In this study we took total of 50 patients in the department of general surgery including both the genders in which majority were male patients compared to female patients .when the study was conducted a questionnaire has been administered that is through one to one interview where the patients were very cooperative .

During the one-to-one interview patients has responded actively where majority of the patients were bothered about their health and their recovery that is hypochondriasis, worries, panic attack, hopelessness, sleep, thought disorder in both of the genders, but the results showed there was mild to moderate and also severity. In rest other mental health, almost all of the patients have responded as mild to moderate and for the severity they have responded very low. After the whole data is collected, the data is analyzed using statistical method that is Mann-Whitney u test where the results showed that anxiety shows difference

between the genders and the rest such as panic attack and other several variables it does not show much difference.

7. Conclusion

The study's primary objective was to describe the mental health status in the hospitalized patients in the department of general surgery. The study was conducted in the departments of general surgery at a teaching hospital in Bengaluru and the study subjects consisted of patients who met inclusion and exclusion criteria. In this study, we took total of 50 patients in the department of general surgery including both the genders in which majority were male patients compared to female patients. When the study was conducted a questionnaire has been administered that is through one-to-one interview. According to the study worries, panic attack, hopelessness, sleep, hypochondriasis, thought disorder in this less severity is seen and most of the patients were either having no issues or they were having mild to moderate. During the one-to-one interview patients has responded actively where majority of the patients were bothered about their health and their recovery that is hypochondriasis, worries, panic attack, hopelessness, sleep, thought disorder in both of the genders, but the results showed there was mild to moderate and less severity. In rest other mental health, almost all of the patients have responded as mild to moderate and for the severity they have responded very low. Out of 50 patients using Mann-Whitney U test, the p-value was found to be less than significant level. So, there is a significant difference in between gender and anxiety levels. Out of 50 patients using Mann-Whitney U test, the p-value was found to be less than significant level So, there is a significant difference in between the gender and panic attack levels.

8. Conflict of interest

There is no conflict of interest.

9. Acknowledgement

We express our sincere gratitude to all those people who have been associated with this study and have helped us with it.

10. References

1. Galderisi S, Heinz A, Kastrup M, Beezhold J, Sartorius N. Toward a new definition of mental health. *World psychiatry*. 2015 Jun;14(2):231.
2. Bhugra D, Till A, Sartorius N. What is mental health?. *International Journal of Social Psychiatry*. 2013 Feb;59(1):3-4.
3. Thøgersen-Ntoumani C, Fox KR, Ntoumanis N. Relationships between exercise and three components of mental well-being in corporate employees. *Psychology of sport and exercise*. 2005 Nov 1;6(6):609-27.
4. Folkins CH, Sime WE. Physical fitness training and mental health. *American psychologist*. 1981 Apr;36(4):373.
5. Crabb R, Hunsley J. Utilization of mental health care services among older adults with depression. *Journal of clinical psychology*. 2006 Mar;62(3):299-312.
6. Ismail Z, Arenovich T, Grieve C, Willett P, Sajeev G, Mamo DC, MacQueen GM, Mulsant BH. Predicting hospital length of stay for geriatric patients with mood disorders. *The Canadian Journal of Psychiatry*. 2012 Oct;57(10):627-34.

7. Jeon SW, Kim YK. Application of assessment tools to examine mental health in workplaces: job stress and depression. *Psychiatry investigation*. 2018 Jun;15(6):553.
8. Sharma VK, Lepping P, Cummins AG, Copeland JR, Parhee R, Mottram P. The global mental health assessment tool-primary care version (GMHAT/PC). Development, reliability and validity. *World Psychiatry*. 2004 Jun;3(2):115.
9. Pn B, Shafee M, Kv JG. Assessment of Anxiety and Depression among Patients Admitted in Tertiary Care Hospital, Karimnagar. a b c d [Internet]. *Psu.edu*. [cited 2023 Oct 4]. Available from: <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=6870f4f622761419fb7eac0380f9f822631859fc>
10. Bakr SA, Kamil S, Khudhr SA. Anxiety among patients undergoing major general surgery [Internet]. *Iasj.net*. [cited 2023 Oct 4]. Available from: <https://www.iasj.net/iasj/download/5261be1eff8490c8>
11. Hadi N. The Prevalence of Anxiety and Depression in Adult Hospitalized Patients in Internal and Surgical Wards of Shiraz Hospitals-1387(2008).. *Shiraz E-Med J*. 2010;11(3):20397.
12. Ukpong DI, Adesunkanmi AR. Psychiatric symptoms in surgical patients: an assessment of the course of anxiety. *The Nigerian Postgraduate Medical Journal*. 2004 Jun;11(2):75-78. PMID: 15300264.
13. Grau Martín A, Suñer Soler R, Abulí Picart P, Comas Casanovas P. Niveles de ansiedad y depresión en enfermos hospitalizados y su relación con la gravedad de la enfermedad [Anxiety and depression levels in medical inpatients and their relation to the severity of illness]. *Med Clin (Barc)*. 2003 Mar 22;120(10):370-5. English. PMID: 12681100.
14. Spornova B, Manns B, Tonelli M, Hemmelgarn B, MacMaster F, Mitchell N, et al. Association of mental health disorders with health care utilization and costs among adults with chronic disease. *JAMA Netw Open* [Internet]. 2019 [cited 2023 Nov 15];2(8):e199910. Available from: <https://pubmed.ncbi.nlm.nih.gov/31441939/>