

Pattern of Mental Disorder in Patients

Shabir Ahmad Lone¹, Dr. Santosh²

¹Research Scholar, OPJS University, Churu Rajasthan

²Assistant Professor, OPJS University, Churu Rajasthan

Abstract

Stress and pressure among young people are likely to blame for the overuse of the phrase "mental disorder" in current society. The purpose of this study is to examine the prevalence of mental illnesses among patients admitted to a medical college hospital between April 1, 2005, and March 31, 2010. Medical college hospital patients hospitalized with mental problems between April 1, 2005 and March 31, 2010 were studied in retrospective research. What we used and how we did it. Documented data taken directly from the files and databases of the office of medical records. The Z test is used to compare the proportions of two groups. A total of 7908 instances of mental illness were reported to the medical college hospital, with 5564% of them being men and 2344% being women. Most of the occurrences occurred in people between the ages of 30 and 44. In the ages of 0 to 29 years and 60 years, mental illness was more common in women, while in the ages of 30 to 59 years, it was more common in men. Males were more likely to suffer from mental illness than females in every year. Most of the instances were related to mood problems. In terms of mental and behavioral illnesses resulting from psychoactive drug use, males were more likely to suffer from mental and behavioral disorders than females. According to the results, mood illness was the most common mental condition, followed by psychoactive substance-related mental and behavioral problems. Most mental illnesses may be avoided with the aid of counseling. The way to managing mental diseases is to improve mental health care facilities.

Keywords: Age, anxiety disorder, mental disorder, nervous system, behavioral disorders.

1. INTRODUCTION

New coronavirus SARS-CoV-2 (COVID-19) pandemic has unparalleled global repercussions, including high rates of death and morbidity, loss of income and long-term social isolation for billions of people. No one knows how this catastrophe will affect the mental health of the general public in the short and long run. There is a lack of research concerning the immediate effects of epidemics on the mental health of people in different groups. Only after the acute phase of the sickness has gone have researchers looked at the long-term effects of the condition on the mental health of people who are not directly impacted by it. Acute stressors, such as fear of infection, job loss, and financial pressure, are also likely to affect the general population at this time. Individuals with a history of trauma may suffer an even greater degree of anguish as a result of this. Depression and suicidal thoughts are likely to rise in those who have experienced sorrow or trauma, as well as those who have had financial or social hardships, in the long term.

Previous catastrophic health epidemics have predominantly affected the mental health of those who survived them (e.g., Ebola viral illness and SARS). The majority of these research demonstrate that those who survived the pandemic suffer more psychologically than those in the impacted areas in the years after the outbreak. People who work in jobs where they are at risk of infection or who have close relatives or friends who have been infected are also more likely to suffer from psychological discomfort. Government regulations and physical distance measures intended at restricting disease transmission may potentially have an influence on mental health in the larger population during the acute phase of COVID-19, however. Some well-known risk factors for mental illness include, but are not limited to, the following: unemployment, financial hardship, and social exclusion. Many nations have already seen a huge rise in unemployment as a consequence of physical separation measures, which is going to have a severe financial impact on many people.

As the epidemic and its long-term repercussions persist, gathering early data of COVID-19's effects is critical for improving mental health care delivery. During the acute period of the pandemic in Australia, a representative sample of Australians was polled in this research. Relative to worldwide instances, as seen by Figure 1, the number of Australian cases had only just begun to rise at this time. There had been almost 36,500 fatalities

recorded worldwide by the time the study ended, with just 19 reported in Australia. For a week before the poll, the Australian government shuttered all restaurants, pubs, and churches, severely limited the size of all public and private meetings, prohibited the entry of foreign people, and enforced quarantine precautions for all Australians returning from abroad.

Aiming to document the current mental health situation in the Australian community, this study aimed to measure the current prevalence of clinically significant symptoms of generalized anxiety and depression, as well as their associations with other recent adversities; and investigating the degree to which symptom severity is associated with exposure to COVID-19 at this critical acute phase. Our calculations also took into consideration the impact of the devastating bushfires that ravaged much of Australia between November 2019 and the beginning of January 2020. COVID-19 exposure and financial, social, and work difficulties were expected to increase psychological distress and diminish psychological well-being.

2. LITERATURE REVIEW

Diana Carolina Neue (2022) Background for the International Classification of Functioning (ICF), symptoms of sickness must be measured independently from capability limits. In today's environment, mental and emotional capabilities are more significant than physical ones. A patient's mental and physical abilities are both diminished in someone with a neurological illness. It's unclear to what extent the comorbidity of neurological and mental illnesses increases psychological impairment. Methods Patients with and without mental comorbidity were included in cross-sectional research conducted at a neurological phase D rehabilitation center. One hundred and four mentally ill inpatients were compared with two hundred and twenty-four neurologically ill unselected patients (NM) (N). With the "International Neuropsychiatric Interview," mental comorbidity was detected. The "Activities and Participation in Psychological Disorders according to the International Classification of Functioning, Disability, and Health" scale was used to measure capacity constraints (Mini-ICF-APP). The Mini-ICF-APP evaluations were validated via the use of patient-reported qualitative data. In this case, the clinical diagnosis came from a regular examination of the patient. Results Endurance (NM: 73.7%; N: 59%), flexibility (NM: 44.0; N: 22.4), professional competence (NM: 36.0; N: 16.8), and task structure (NM: 36.0) were some of the most common areas where patients were found to have severe capacity limits that required help from others (NM: 32.5 percent vs. N: 15.0 percent). Dyadic connection impairments were the least common (NM: 23.7 percent vs. N: 7.9 percent). Both groups ranked impairments in the same order and described them in identical terms. Conclusion Patients who suffer from neurological illnesses often have significant limits in their ability to do daily activities. This is amplified much more by the presence of mental illness. There is a need for specialized care.

Arman Arab (2022) We discovered, after a thorough search, that no prior research has examined the relationship between main eating patterns and mental health in migraine sufferers. An Iranian migraine patient sample was included in this research, and the goal was to examine the link between empirically-derived food patterns and depressive, anxious, and stress symptoms in the participants. For this research, a simple random selection procedure was used to choose 262 migraine patients aged 20–50 years. Using a validated 168-item, semi-quantitative food frequency questionnaire (FFQ), we were able to identify the key dietary trends of the preceding year (PCA). DASS-21 was employed by the authors to measure participants' levels of depression, anxiety, and stress. Analysis comprised multinomial logistic regression and findings were reported as odds ratio (OR) with a 95 percent confidence interval (CI). "Traditional," "Western," and "healthy" diets were all included in our analysis. A healthier diet was associated with a decreased risk of depression and stress when relevant confounders were taken into account (OR = 0.44, 95 percent confidence interval [CI]: 0.22, 0.88; P for trend: 0.030). However, there was no correlation between western and traditional diets and mental illnesses. In the end, healthy eating behaviors were shown to be associated with lower rates of sadness and stress. Consuming more fruits and vegetables as well as limiting fast food and snacking is recommended for migraine sufferers in order to lower the risk of depression. Also limiting the consumption of cola drinks as well as processed meat and fish is recommended to reduce the risk of stress.

Ivana Lúcia Damásio Moutinho (2019) Only a few long-term research has been done on medical students' mental health and quality of life (QoL) globally. After two years of observation, we set out to determine the frequency and prevalence as well as possible risk factors for poor mental health among Brazilian medical students and to look for signs of depression, stress, and other mood disorders. Assessments were conducted on students' mental health (DASS-21), quality of life (WHOQOL-Bref), and religiousness (DUREL) in four waves (four semesters). Only 312 (54.2 percent) medical students answered all four rounds. There was a significant incidence and prevalence of mental problems among medical students. Students with depression, anxiety, and

stress were found in over half of the students who completed the two-year follow-up, and about one in ten of these students had not previously been diagnosed at the beginning of the study. Predictors of poor mental health and quality of life in the follow-up included characteristics such as depression, stress, low income, female gender, being in the early stages of medical study, and being non-white. Medical students are shown to have a significant frequency and incidence of mental health issues throughout their training. Teachers may use this information to design preventative measures.

Ji-Ryang Kim (2018) Type 2 diabetes mellitus and cardiovascular disease are both linked to the metabolic syndrome (Meets), which is a pro-inflammatory condition. There has been recent research on the correlations between mental health, quality of life, and other disorders and inflammation. A marker of inflammation, serum high-sensitivity C-reactive protein (hs-CRP), and quality of life and mental symptoms in Korean individuals with Meets were examined in this study. Cross-sectional surveys completed in January to December 2015 by the Korean National Health and Nutrition Examination Survey were utilized in the study. In this research, data from 1600 individuals was gathered and evaluated. The EuroQol 5-dimensional (EQ-5D) instrument was used to measure quality of life. Inverse connection was found between hs-CRP levels and the EQ-5D quality of life index. Among persons with Metastatic Spastic Paraplegia (MetS), high hs-CRP levels were linked to mobility issues and suicidal thoughts (OR 1.66, 95% confidence interval [CI] 1.03–2.66, $p = 0.036$; OR 2.48, 95% confidence interval [CI] 1.23–4.99, $p = 0.011$). MetS's higher inflammatory state may be linked to worse quality of life and mental health issues, according to these data. We need more long-term, prospective trials to establish the link between inflammation and mental health in individuals with MetS.

Marina Antonopoulou (2019) Students' mental and physical health and academic performance may be enhanced, as well as their overall well-being, if they follow a healthful diet like the Mediterranean Diet (MD). Furthermore, this research sought to examine the existing epidemiological data on MD adherence among university student groups. PubMed was searched using relevant keywords in a thorough manner. Students' eating habits are shifting away from medical norms and toward unhealthier ones, particularly among those who are studying away from home or who are from a Mediterranean nation. Study after study has shown a correlation between reduced MD adherence and worse student health condition. There was a link between reduced depression risk and more frequent use of the doctor's prescriptions, whereas a greater stress level was linked to a lower consumption of fruits and vegetables. Although students had access to courses and lectures, this did not have an impact on their compliance with MD. Even students from medical and nutrition-related universities revealed alarmingly low levels of awareness about good eating habits. It's critical to refocus study on diet's impact on students' well-being and academic performance in light of the importance of this topic.

3. MATERIALS AND METHODS

Ethics This research was done from April 1, 2005, to March 31, 2010, among patients hospitalized with mental illnesses to a medical college hospital. The medical records department of the medical college hospital in Ernakulam district, Kerala, India, has gathered data from the medical records registries. The ethics committee at the university granted authorization for this investigation to proceed.

Study design

Selection of description of participants

A retrospective design was used. The research was carried out on individuals admitted to the hospital with mental illnesses between April 1, 2005, and March 31, 2010. The medical college hospital in Ernakulam, Kerala, was used for the research. Patients hospitalized to the medical college hospital between April 1, 2005, and March 31, 2010, who had been diagnosed with a mental illness, comprise the study population. Documented data taken directly from the files and databases of the office of medical records. Coding in the medical records department is done in accordance with ICD-10-CM rules.

Statistics

The Z test is used to compare percentages. There is a significant difference in proportions between the two groups if the P value is less than or equal to 0.05. For the analysis of the data, Microsoft Excel was used. The information was gathered using ICD-10 coding.

4. RESULTS

There was a total of 7908 instances of mental illness documented at the medical college hospital. There were 5564 males and 2344 females among the total number of patients. In Table 1, the second column shows the number of cases and percentages of males with mental disorders in each age range, while the third column shows the number of cases and percentages of females with mental disorders in each age range. Most people with mental health issues are in the 30–44-year-old age range. The age range of 18 to 29 years has the third highest number of incidences of mental illness. This might have occurred as a result of tension and anxiety. Mental problems were more prevalent in women between the ages of 0 and 29, but more prevalent in men between the ages of 30 and 59.

Table 1: Comparing sex-wise proportion of mental disorders reported in each age group

Age group	Male	Female	Total	P value
0-9	358 (6.4%)	207 (8.8%)	565 (7.1%)	0.0017
10-17	108 (1.9%)	113 (4.8%)	221 (2.8%)	0.0001
18-29	898 (16.1%)	573 (24.4%)	1471 (18.6%)	0.0001
30-44	2209 (39.7%)	687 (29.3%)	2896 (36.6%)	0.0001
45-59	1462 (26.3%)	491 (20.9%)	1953 (24.7%)	0.0001
≥60	529 (9.5%)	273 (11.6%)	802 (10.1%)	0.0001
Total	5564	2344	7908	

In the under-60-year-old demographic, ladies were more likely than males to suffer from mental illness. # Figure 1 shows that male mental illness was more prevalent than female mental illness in each year. Second, third, and fourth columns in Table 2 show the number, percent, and percentage of male cases, respectively, as well as the number, percent, and percentage of female cases. Dementia, mental and behavioral disorders resulting from psychoactive substance use, schizophrenia, schizotypal and delusional disorders, mood disorders, neurotic, stress-related, and somatoform disorders, behavioral syndromes associated with physiological disturbances and physical factor, mental retardation were found to be gender-specific. Males were more likely to suffer from mental and behavioral difficulties as a result of their usage of psychoactive substances. There were more females than males with mental retardation in dementia cases, and more males than females with Alzheimer's disease dementia [Table 1], as well as more females than men with unspecified dementia [Table 1]. Schizophrenia, schizotypal and delusional disorders, mood and anxiety disorders, neurotic disorders, stress-related disorders, and somatoform disorders are among the behavioral syndromes associated with physiological disturbances and physical factors.

Table 2: Pattern of mental disorder cases of patients admitted in a medical college hospital from 1st April 2005 to 31st March 2010

Types of mental disorders	Male (%)	Female (%)	Total (%)	P value
Dementia (F00-F03)	69 (1.2)	44 (1.9)	113 (1.4)	0.0143
Organic amnesic syndrome, not induced by alcohol and other psychoactive substances. (F04)	0 (0)	0 (0)	0 (0)	

Delirium, not induced by alcohol and other psychoactive substances (F05)	35 (0.6)	20 (0.9)	55 (0.7)	0.1378
Other mental disorders due to brain damage and dysfunction and to physical disease. (F06)	19 (0.3)	10 (0.4)	29 (0.37)	0.5028
Personality and behavioral disorder due to brain disease, damage, and dysfunction (F07)	71 (1.3)	42 (1.8)	113 (1.43)	0.1074
Unspecified organic or symptomatic mental disorder. (F09)	14 (0.3)	12 (0.5)	26 (0.33)	0.2112
Mental and behavioral disorders due to psychoactive substance use. (F10-F19)	2465 (44.3)	18 (0.8)	2483 (31.4)	0.00001
Schizophrenia, schizotypal, and delusional disorders (F20-F29)	494 (8.9)	359 (15.3)	853 (10.79)	0.0001
Mood disorders (F30-F39)	2187 (39.3)	1560 (66.6)	3747 (47.38)	0.00001
Neurotic, stress-related and somatoform disorders. (F40-F48)	87 (1.6)	182 (7.8)	269 (3.4)	0.00001
Behavioral syndromes associated with physiological disturbances and physical factor (F50-F59)	6 (0.1)	23 (1)	29 (0.37)	0.0001
Disorders of adult personality and behavior (F60-F69)	9 (0.2)	2 (0.09)	11 (0.14)	0.2006
Mental retardation (F70-F79)	75 (1.3)	53 (2.3)	128 (1.62)	0.0019
Disorders of psychological development (F80-F89)	2 (0.04)	0	2 (0.03)	
Behavioral and emotional disorders with onset usually occurring in childhood and adolescence (F90-F98)	29 (0.5)	16	45 (0.57)	0.3078
Unspecified mental disorder (F99)	2 (0.04)	3	5 (0.06)	0.2542

5. DISCUSSION

Symptoms of anxiety disorder include excessive worry or dread that impairs a person's ability to carry out everyday tasks. For adults, neuropsychiatry disorders were reported to have an aggregate point prevalence of roughly 10%. When considered unusually stiff and maladaptive, a person's basic qualities that impact their thoughts and actions in many settings and over time might become disordered. Autism spectrum diseases, oppositional defiant disorder, conduct disorder, and attention deficit hyperactivity disorder are all examples of childhood developmental problems that may persist into adulthood. As many as one out of every three persons in the globe suffer from a mental condition at some point in their lives., 46% of Americans have experienced mental illness at some time in their lives. Mental illness affects an estimated 45 per cent of Australian adults at some point in their life, according to the Australian Bureau of Statistics National Survey of Mental Health and Wellbeing. Reddy and Chandrasekhar conducted a meta-analysis of available Indian research and found that the total prevalence of mental illnesses in the population was 5.8 percent. Psychiatric morbidity ranges from 40% to 75% in underdeveloped nations. Women are 1.5 to 2 times more likely to suffer from mental disease in Kerala, according to the State Mental Health Authority (KSMHA). According to Chief Psychiatrist of Medical Trust Hospital, Kochi, Dr. C.J. John, mental problems in women are connected directly to divorce and increased unemployment. Reddy's meta-analysis of 13 trials including 33,572 people

Table 3: Types of dementia cases reported in a medical college hospital during the period from 1st April 2005 to 31st March 2010

Types of dementia	Male	Female	Total (%)	P
-------------------	------	--------	-----------	---

	(%)	(%)	value
Dementia in Alzheimer's disease (F00)	28 (40.6)	9 (20.5)	37 (32.7) 0.0089
Vascular dementia (F01)	24 (34.8)	12 (27.3)	36 (31.9) 0.3954
Dementia in other diseases classified elsewhere (F02)	0 (0)	2 (4.5)	2 (1.8)
Unspecified dementia (F03)	17 (24.6)	21 (47.7)	38 (33.6) 0.0001
	69	44	113

who conducted a meta-analysis of 15 Indian research, the overall morbidity rate for mental disorders was 5.82 percent. More than ten percent of Kerala's population has mental health issues, including schizophrenia and manic depression, psychosomatic condition and neurosis, as well as one in every 100 children under the age of six being intellectually retarded. There are more people with mental diseases in South India as a whole. The state of Kerala's plight has been exacerbated by causes such as drunkenness, suicides, divorces, and domestic violence, which are all prevalent in the state. Many of these are, regrettably, the unintended consequences of Kerala's societal development. Dr. D Raju, the Secretary of Kerala State Mental Health Authority, argues that these are issues that impact a developed society.

19 percent of the state's suicides are attributed to mental health issues, according to the Kerala State Crime Records Bureau. Kerala has India's second-highest suicide rate after Sikkim, with 25.3 deaths by suicide per 100,000 residents. According to a long-term study, anxiety problems are much more widespread than drug abuse or issues with impulse control or self-control. According to an examination of anxiety disorder surveys in several nations, 16.6 percent of the population suffers from the illness at some point in their lifetimes. Anxiety disorders affected 28.8% of Americans, while 13.6% of those in the Alonso et al. research had anxiety disorders.

Depression and drug addiction are common co-occurring illnesses with anxiety disorders. Anxiety disorders are more common in women than in men. Anxiety levels may range from as low as 16 percent to as high as 45 percent. research found that 10% of the adult population was affected at any one moment. Psychoactive drug use was responsible for 31.4 percent of mental and behavioral problems in this research, whereas behavioral syndromes linked to physiological abnormalities and physical factors accounted for 0.37 percent. It has been reported that depression, alcohol abuse disorders (including schizophrenia and bipolar disorder), and other mental health issues contribute to the worldwide burden of illness in the 15 to 44-year-old age range.

In affluent nations, the prevalence of depression ranges from 23% to 86%. In the current research, 10.79 percent of the participants had mental illnesses related to schizophrenia, schizotypal and delusional disorders. One explanation for the discrepancy is that this research was carried out in a poor country. One large Norwegian survey indicated a five-year prevalence of 13.4 percent for personality disorders (PDs), according to Torgersen Set a research 's report. Personality problem was found to be 14.79 percent in a US study.

Only 0.14 percent of mental problems in the current research were attributed to adult personality and behavioral issues, whereas 1.43 percent were attributed to brain disease and malfunction. Studies of mood disorders in various nations reported lifetime rates of 6.7% for severe depression (higher in certain studies especially for females) and 0.8% for bipolar I disorder. It was 20.8% in the USA Alonso et al. found that 13.9 percent of participants reported having mood disorders. Mood disorders are more common among women. Mood disorders, according to an ongoing study, are the second most common kind of mental condition. Mood disorders accounted for 47.33 percent of all mental illnesses in this research. This may have been due to the fact that this research was conducted in a hospital. The denominator in this example is the number of mental illness cases. An estimated 24.8 percent of Americans suffer from impulse control issues.

Studies have consistently shown lower rates of drug and impulse control issues. that in the United States, 14.6 percent of the population suffers from a drug use problem, and 5.2 percent of the population suffers from alcohol abuse. Males are more likely than females to suffer from drug use problems and impulsive behavior.

Psychoactive drug usage was shown to be the cause of 31.4% of all mental problems, according to the findings of this research. This discrepancy might be attributable to research carried out in Kerala. Compared to other states in India and other nations, the usage of alcohol in Kerala is much higher. The lifetime prevalence of schizophrenia was determined to be 0.4 percent in an international evaluation of research. Schizophrenia affects around one in every 100 Australians at some point in their lives. 10% of mental illness was caused by schizophrenia, schizotypal and delusional disorders in this research. Dementia was found to be 1.3 percent prevalent in the 65 and older age group in Indian research. 10 percent to 11 percent of community-dwelling persons aged 65 and older were found to have dementia, according to recent research.

ICD 10 diagnostic criteria were used to classify 56 instances of dementia, and 30 (54 percent) were found to be caused by Alzheimer's disease whereas 4 (seven percent) were found to be caused by something else (1 case of tuberculous infection, 1 case of head trauma, and 2 cases of cerebral tumors). [26] According to the Indian research, the percentage of Alzheimer's disease varied from 41% to 66%. Alzheimer's disease was shown to be responsible for 32.7% of cases of dementia, with the remaining 1.8% attributed to other factors. Researchers found that 11.4 people in every 1000 had vascular dementia in one research. Six women and sixteen men were among the 22 people with vascular dementia who were studied (1:2.7). Vascular dementia affected more males than women.

in this investigation, there was no sex-based difference in vascular dementia. According to one research, vascular dementia affects anything from 22 percent to 58 percent of people. Another research found that vascular dementia was responsible for 39% of all dementia cases. Vascular dementia accounted for 58% of all dementia cases in rural Kerala. Vascular dementia accounted for 27% and 26% of all cases in studies performed in Tamil Nadu, a nearby state to Kerala. Vascular dementia caused by vascular illness accounted for 31.9% of cases in this research. Mental illness is more common as people become older, rising from the youngest (18–29-year-olds) to the second-oldest (30–44 year old5) and then declining, sometimes significantly, in the oldest (60+ year old). According to this research, mental illness is on the rise among the younger participants (18–29 years old) and subsequently reduces among the oldest (30–44-year-olds).

6. CONCLUSION

It was shown in the survey that the number of people suffering from mental illnesses is rising steadily. In Kerala, mental health care is the most under-appreciated area. The current research focuses on a variety of mental health issues that affect both sexes. In spite of the fact that Kerala is a fast-developing state in India, with health indicators equivalent to those of industrialized countries and a growing number of counseling facilities and hospitals, the most deserving groups remain in the dark, regardless of their socioeconomic standing. For this reason, new dimensions like helplines or clinics should be established in schools, colleges, and other social network areas where the care has to be extended for diagnosing mental problems at the early stages and preventing their consequences for the individuals and the society in which they live. "

7. REFERENCE

- [1] Neue, Diana Carolina & Linden, Michael & Muschalla, Beate. (2022). Capacity limitations in neurology patients, with and without comorbid mental disorders. *Journal of Psychosomatic Research*. 159. 110928. [10.1016/j.jpsychores.2022.110928](https://doi.org/10.1016/j.jpsychores.2022.110928).
- [2] Arab, A., Rafie, N., Hadi, A. et al. Empirically derived dietary patterns and their association with mental health: a cross-sectional sample of Iranian migraine patients (2019–2020). *BMC Nutr* 8, 28 (2022). <https://doi.org/10.1186/s40795-022-00522-x>
- [3] outinho ILD, Lucchetti ALG, da Silva EO, Lucchetti G. Mental health and quality of life of Brazilian medical students: incidence, prevalence, and associated factors within two years of follow-up. *Psychiatry Res*. 2019;274:306–12.
- [4] Kim J-R, Kim H-N, Song S-W. Associations among inflammation, mental health, and quality of life in adults with metabolic syndrome. *Diabetol Metab Syndr*. 2018;10(1):1–8.
- [5] Antonopoulou M, Mantzorou M, Serdari A, Bonotis K, Vasios G, Pavlidou E, et al. Evaluating Mediterranean diet adherence in university student populations: does this dietary pattern affect students' academic performance and mental health? *Int J Health Plann Manage*. 2020;35(1):5–21.
- [6] Celine TM, Antony J. A study on mental disorders: 5-year retrospective study. *J Fam Med Primary Care* 2014;3:12-6.
- [7] Faghiih S, Babajafari S, Mirzaei A, Akhlaghi M. Adherence to the dietary approaches to stop hypertension (DASH) dietary pattern and mental health in Iranian university students. *Eur J Nutr*. 2020;59(3):1001–11.

- [8] Jacka FN, Mykletun A, Berk M, Bjelland I, Tell GS. The association between habitual diet quality and the common mental disorders in community-dwelling adults: the Hordaland Health study. *Psychosom Med*. 2011;73(6):483–90.
- [9] Ricci-Cabello I, Meneses-Echavez JF, Serrano-Ripoll MJ, Fraile-Navarro D, Fiol de Roque MA, Moreno GP, et al. Impact of viral epidemic outbreaks on mental health of healthcare workers: a rapid systematic review. *medRxiv* (2020). doi: 10.1101/2020.04.02.20048892
- [10] Holmes EA, O'Connor RC, Perry VH, Tracey I, Wessely S, Arseneault L, et al. Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. *Lancet Psychiatry* (2020) 7:547–60. doi: 10.1016/S2215-0366(20)30168-1
- [11] Fitch C, Hamilton S, Bassett P, Davey R. The relationship between personal debt and mental health: a systematic review. *Ment Health Rev J* (2011) 16:153–66. doi: 10.1108/13619321111202313
- [12] Repper J, Carter T. A review of the literature on peer support in mental health services. *J Ment Health* (2011) 20:392–411. doi: 10.3109/09638237.2011.583947
- [13] Jenkins R, Bhugra D, Bebbington P, Brugha T, Farrell M, Coid J, et al. Debt, income and mental disorder in the general population. *Psychol Med* (2008) 38:1485–93. doi: 10.1017/S0033291707002516
- [14] . Rajkumar S, Kumar S. Prevalence of dementia in the community: A Rural urban comparison from Madras, India. *Aust J Ageing* 1996;15:13.
- [15] Shaji S, Bose S, Verghese A. Prevalence of dementia in an urban population in Kerala, India. *Br J Psychiatry* 2005;186:136-40.

