Section: Psychiatry

Original Research Article

KNOWLEDGE AND ATTITUDES OF NON PSYCHIATRIC JUNIOR RESIDENTS TOWARDS MENTAL ILLNESS

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ABSTRACT

Background: Mental illness contributes significantly to the global disease burden, yet stigma and negative attitudes toward mental health patients persist, even among healthcare professionals. Non-psychiatric junior residents may lack adequate knowledge and hold stigmatizing attitudes, affecting their ability to refer patients for psychiatric care. This study aims to assess the knowledge and attitudes of non-psychiatric junior residents toward mental illness

Materials and Methods: This cross-sectional study was conducted over a three-month period, targeting non-psychiatric junior residents from medical colleges across Andhra Pradesh, India. A total of 620 participants completed a questionnaire administered via Google Forms, including the Mental Health Knowledge Schedule (MAKS) and the Mental Illness Clinician's Attitude Scale (MICA). Data were analyzed using SPSS version 21. Pearson's correlation coefficient was employed to explore the relationship between knowledge and attitudes toward mental illness.

Results: The mean MICA score was 48±10.57, indicating negative attitudes toward mental illness. Unfavorable responses were noted in areas such as knowledge-seeking, disclosure of mental illness, and perceived danger posed by psychiatric patients. However, some positive attitudes were observed, such as willingness to work with mentally ill colleagues and belief in patient recovery. The mean MAKS score was 46.82±4.18, with a significant inverse correlation between knowledge and attitudes, suggesting that better knowledge was associated with more positive attitudes.

Conclusion: Although knowledge about mental illness among non-psychiatric junior residents is relatively high, stigmatizing attitudes remain prevalent. This underscores the need for educational interventions to address negative attitudes and promote a better understanding of mental health among healthcare providers.

Keywords: Mental illness, stigma, non-psychiatric residents, mental health knowledge, attitudes, education, psychiatry.

INTRODUCTION

The prevalence of mental health disorders is high and their contribution to the global disease burden is on the rise.[1] No matter a person's age, culture, or financial standing, they are susceptible to developing a mental disease at any point in their lifetime. "a set of negative attitudes and beliefs that motivates individuals to reject, avoid, and discriminate against people with mental illness," is the definition of stigma when it comes to mental disease.[2] Not only does the lack of proper understanding, social distancing by society, unfavourable attitudes, and behaviours that are exclusionary or discriminatory towards mentally ill individuals have an influence on the lives of psychiatric patients, but it also has an impact on the lives of their families and the psychiatrists who treat them. Additionally, it restricts access to mental health care.[3]

Often in health care facilities, patients are infrequently referred to psychiatrists or other mental health professionals, one reason for this might be the patients being uncomfortable for visiting a psychiatrist because they do not want to be stigmatized by others and the other reason could be the inadequate knowledge of the physicians about mental illnesses. So this study aims to assess the knowledge of non-psychiatric Junior residents during their training period itself based on which we can identify the need of conducting educational programmes to raise awareness about the stigmatizing attitudes towards mental illnesses.

Aim and Objectives

- To assess the knowledge of medical residents towards mental illness and to investigate their attitudes towards mentally ill persons.
- To determine the relationship between knowledge and attitude towards mental illness.

MATERIALS AND METHODS

The study was a cross-sectional design conducted over a period of three months, focusing on non-psychiatric junior residents in medical colleges across the state of Andhra Pradesh. The study took place at various medical colleges within the state, utilizing a convenient sampling technique to select participants from the target population.

Sample size

Sample size is calculated using the formula.

Where Z is the standard normal value and it is 1.96 at 95% confidence D is the clinically expected variation and it is 1.5% of the mean.

Based on the reference article cited below,[2] the mean score was found to be 39 and Standard deviation was found to be 6.84.

Substituting the values in the above mentioned formula we got the required sample size of 525

Inclusion Criteria

Residents who give consent for the study

Exclusion Criteria

Residents with past or present history of psychiatric illness

Residents who have sought mental health services

Residents who has friends and family members with a history of mental illness

Study procedure

- A google form with study tool was designed with an informed consent form on the first page clearly explaining the details of the study. The link to the form was circulated in the study population using whatsapp groups. up on access to the form, the participants were required to give informed consent and thereafter asked to fill a semi structured questionnaire with sociodemographic characteristics, and tools for assessing knowledge and attitudes towards mental illness.

Tools for data collection: The questionnaire was a self-report measure that comprised three main sections and is circulated in english language using google forms.

• Sociodemographic data containing details of name, age, gender, and the level of residency.

- Mental Health Knowledge Questionnaire(MAKS),[4]a 12 item questionnaire given by evans-lacko et al.Higher scores indicate higher knowledge and the score ranges between(12-60) The overall test reliability was 0.71 and the overall Internal Consistency (IC) among items was 0.65.
- Mental illness Clinicians Attitude Scale(MICA)2,[5] a 16 item questionnaire given by Kassam, A et al.Higher scores indicate negative attitudes and the score ranges between (16-96) It has good IC, 0.79 and test retest reliability was 0.80

Data Collection Procedure

- Residents were given online questionnaires, and all the participants responses were stored in an online database that only the authors could access and download from. The data is summarised in tables.

Ethical Considerations

- The autonomy and confidentiality of the participant was respected
- Informed consent was obtained from all students by communicating the purpose and requirements of the study.
- Study was conducted after getting approval given by institutional ethics committee.

Statistical Analysis

- All statistical analysis was done by using SPSS trail version 21 and in MS EXCEL
- Qualitative variables were expressed as in frequencies and percentages
- Quantitative variables were expressed as means and standard deviations
- Karl –pearson correlation coefficient was used for exploring the relationship between two variables knowledge and attitudes
- For all statistical analysis $p<0.05$ was considered as statistically significant.

RESULTS

The study included 620 Junior Residents that represented 66%of the responses after exclusion of the residents that met the exclusion criteria.More than half of them were females 336 (54.2%)and males 284 (45.8%). Mean score of two scales (MICA 48±10.57) and (MAKS 46.82±4.180)were considered as the cut-off points.

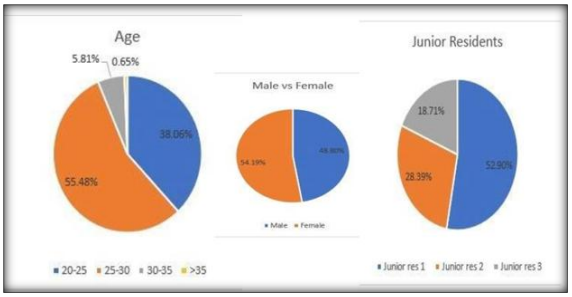


Figure 1: Demographic variables

MICA-Mental Illness Clinician's Attitude Scale

- This questionnaire contains 16 questions, with each questions scored on a six point Likert scale
- A person's MICA score is the sum of the scores for the individual items.
- For items 3, 9, 10, 11, 12, and 16, items are scored as follows: Strongly agree = 1, agree = 2, Somewhat agree = 3, somewhat disagree = 4, disagree = 5, strongly disagree = 6.
- All other items (1, 2, 4, 5, 6, 7, 8, 13, 14, 15) are reverse scored as follows: Strongly agree = 6, agree = 5, somewhat agree = 4, somewhat disagree = 3, disagree = 2, strongly disagree = 1
- MICA measures the level of stigmatizing attitudes of participants towards psychiatry and people with mental disorders.
- Higher scores on MICA suggests stronger stigma and more negative attitudes.
- Sixteen questions in the Questionnaire were broken into four domains of,[6]
- stigma towards psychiatric illness (Questions 2,4,5,7,13,15),
- Seeking knowledge (Question 1)
- Stigma towards professionals (Questions 8,14) and
- Positive attitude (Questions 3,6,9,10,11,12,16)

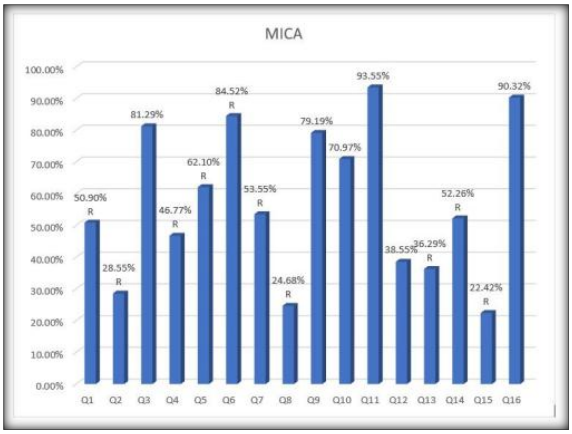
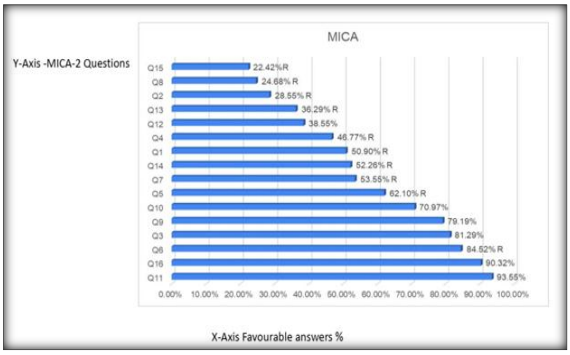


Figure 2: MICA



These are the percentages when Strongly agree, Agree and Somewhat agree are considered

MICA

- The mean total score of MICA was 48±10.57
- Statistical analysis had depicted that the mean score of nonpsychiatric junior residents was high, suggesting negative attitudes toward mental illness.[9]
- When individual mean score were analysed we found unfavourable attitudes towards the following In questions 1,4,5,6,7,12,14
- Non-psychiatric Junior Residents read about psychiatry only for examination purpose and would not bother to get additional knowledge about it (Q1 3.45±1.69) and if they are suffering from any mental illness they will not reveal it out in fear of discrimination(Q4 3.2±1.52),(Q7 3.44±1.47)
- They felt mentally ill persons are dangerous to the society (Q5 3.75±1.50) and also that the public needs to be protected from people with severe mental illness (Q12 3.76±1.48)
- Majority of the junior residents acknowledged that Psychiatrists know more about the lives of people treated for mentally illness than the family members or relatives (Q6 4.71±1.14)
- Junior residents expected general practitioners to do thorough assessment of patients with psychiatric symptoms before referring them to a psychiatrist(Q14 3.57±1.55)
- On the other hand, they also show some optimistic attitudes towards mentally ill persons as they think he/she can recover and live good quality of life (Q2 2.71±1.52) and they would not have any issues to work with mentally ill colleagues (Q16 2.23±1.0) and they feel as comfortable talking to a person with mental illness as they do talking to a person with physical ilness(Q10 2.74±1.26) and they would also not use terms like 'crazy', 'nutter', 'mad' for description of their colleagues suffering with mental illness (Q15 2.32±1.43)and also they will not follow instructions given by senior colleagues to treat mentally ill in a disrespectful manner and treat them as equal as other patients (Q9 2.84±1.709). If a person with mental illness have physical complaints, they should evaluate and should not blame it to the existing mental illness (Q13 2.92±1.37)

- Non Psychiatric Junior residents agreed that psychiatry is as scientific as other fields of medicine (Q3 2.40±1.33) And working in a psychiatric field or as a psychiatrist is as respectful as other medical branch/professionals (Q8 2.42±1.43) and according to them, it is necessary that health care professionals taking care of patients with mental illness should also assess their physical health(Q11 1.99±0.97). The mean score was 48±10.57
- (50.9%)agreed that they just learn about mental health when needed, and would not bother reading additional material on it.
- (28.55%)believed that People with a severe mental illness can never recover enough to have a good quality of life .
- (81.29%) agreed that Working in the mental health field is just as respectable as other fields of health and social care .
- 46.77% agreed that If they had a mental illness , they would never admit this to their friends because of fear of being treated differently.
- (62.10%)believed that People with a severe mental illness are dangerous
- (84.52%)believed that psychiatrists know more about the lives of people treated for a mental illness than do family members or friends.
- (53.55%)agreed that If they had a mental illness, they would never admit this to their colleagues for fear of being treated differently.
- (24.68%)believed that Being a health/social care professional in the area of mental health is not like being a real doctor. (79.19%)agreed that If a senior colleague instructed them to treat people with a mental illness in a disrespectful manner, they would not follow their instruction.
- (70.97%)agreed that they feel as comfortable talking to a person with a mental illness as they do talking to a person with a physical illness.
- (93.55%) believed that It is important that any health/social care professional supporting a person with a mental illness also ensures that their physical health is assessed.
- (38.55%)believed that the public does not need to be protected from people with a severe mental illness.
- (36.29%) believed that If a person with a mental illness complained of physical symptoms (eg chest pain) they would attribute it to their mental illness.
- (52.26%)agreed that General practitioners should not be expected to complete a thorough assessment for people with psychiatric symptoms because they can be referred to a psychiatrist.
- (22.42%)agreed that they would use the term 'crazy' ,'nutter' , 'mad' etc. to describe to colleagues people with a mental illness who they have seen in the work and
- (90.32%)agreed that If a colleague told them they had a mental illness, they would still want to work with them.

MAKS-MENTAL HEALTH KNOWLEDGE SCHEDULE

MAKS

- MAKS contains 2 Parts
- Part -A (items 1- 6)questions aimed at measuring knowledge and understanding of stigma and discrimination

1. Help seeking
2. Recognition
3. Support
4. Employment
5. Treatment
6. Recovery

- Part –B (items 7–12) were used to assess participants' correct identification of Depression, Stress, Schizophrenia, Bipolar Disorder, Drug Addiction, and Grief as mental illnesses and to contextualize responses in Part A.
- This is a five-point Likert scale where agree strongly agree slightly neither agree nor disagree strongly disagree slightly don't know are the options
- A higher score on MAKS suggests more stigma-related mental health knowledge.
- Non-psychiatric Junior residents believed that people with severe mental illness could fully recover(Q5 3.95±0.97) and they agreed to the fact that medication (Q3 4.1 ±0.90)and psychotherapy (Q4 4.56±0.74)as the effective treatment measures for people with mental health problems. They also acknowledged that most people with mental health problems want to have paid employment(Q1 3.79±0.97)
- Majority of the Junior residents know what advice to give to people with mental health problems(Q2 4.28±0.83)and they strongly disagreed with the statement that people with mental health problems go to a health care professional to get help(Q6 2.86±1.32)
- Junior Residents have perfect knowledge of various mental illness conditions Depression(Q7 4.57±0.75) Schizophrenia (Q9 4.81± 0.55) Bipolar disorder (Q10 4.8 ±0.55) Drug addiction (Q11 4.31± 1.01) And they disagreed that stress(Q8 2.43±1.39) and grief(Q12 2.3±1.33) as mental illness.

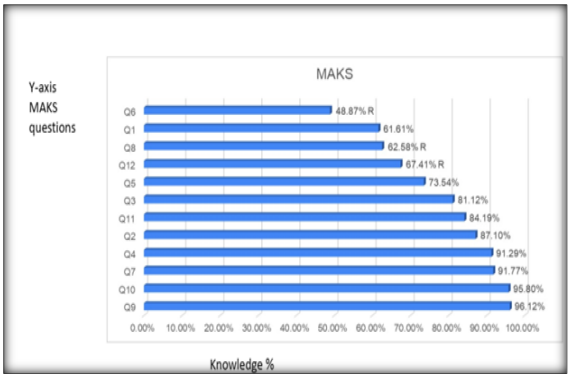


Figure 3: MAKS

Percentages when only agree strongly and agree slightly are considered.

The mean score of the population for MAKS is 46.82±4.18. (90%-5Q) Of respondents agreed that people with a severe mental illness (SMI) can fully recover (93.39%-3Q) and (98.06%-4Q)of the respondents agreed that medication and psychotherapy can be an effective treatment for people with mental illness respectively. (93.23%-2Q) of respondents knew what advice they would give a friend who may be suffering with mental illness (85.16% -1Q)believed that most people with a mental health problem want to have paid employment while only (63.87%-6Q) people believed that most people with a mental problem go to a healthcare professional for help. (91.77%-7Q),(96.13%-9Q),(95.8%-10Q),(84.19%-11Q)correctly identified that Depression, Schizophrenia, Bipolar disorder and Drug addiction as Mental Illnesses. whereas (62.58% -8Q) and (67.41%-12Q) misidentified stress and grief as mental disorders respectively.

CORRELATION BETWEEN ATTITUDES AND KNOWLEDGE

- Pearson's correlation coefficient was calculated to find if there is any correlation between Knowledge and attitudes.
- The above table shows that there is a significant inverse relationship between knowledge and attitude scores among junior residents towards mental illness
- That is High scores on MAKS were positively correlated with low scores on MICA and Low score on MAKS were positively correlated with high scores of MICA
- Depicting that those who has good knowledge have positive attitudes towards mental illness
- The correlation is statistically significant At the 0.01 level.

Table 1: MICA

Q.No	Strongly Agree	Agree	Some What Agree	Somewhat Disagree	Disagree	Strongly Disagree	Mean±Std Dev
Q1 R	75 (12.10%)	147 (23.71%)	94 (15.16%)	74 (11.94%)	127 (20.48%)	103 (16.61%)	3.45±1.69
Q2 R	40 (6.45%)	65 (10.48%)	72 (11.61%)	92 (14.84%)	202 (32.58%)	149 (24.03%)	2.71±1.52
Q3	167 (26.94%)	245 (39.52%)	92 (14.84%)	44 (7.10%)	54 (8.71%)	18 (2.90%)	2.40±1.33
Q4 R	37 (5.97%)	113 (18.23%)	140 (22.58%)	72 (11.61%)	163 (26.29%)	95 (15.32%)	3.2±1.52
Q5 R	71 (11.45%)	155 (25%)	159 (25.65%)	87 (14.03%)	85 (13.71%)	63 (10.16%)	3.75±1.50
Q6 R	163 (26.29%)	253 (40.81%)	108 (17.42%)	64 (10.32%)	26 (4.19%)	6 (0.97%)	4.71±1.14
Q7 R	46 (7.42%)	123 (19.84%)	163 (26.29%)	81 (13.06%)	141 (22.74%)	66 (10.65%)	3.44±1.47
Q8 R	18 (2.90%)	62 (10%)	73 (11.77%)	55 (8.87%)	216 (34.84%)	196 (31.61%)	2.42±1.43
Q9	242 (39.03%)	207 (33.39%)	42 (6.77%)	31 (5%)	55 (8.87%)	43 (6.94%)	2.32±1.57
Q10	115 (18.55)	180 (29.03%)	145 (23.39%)	114 (18.39%)	62 (10%)	4 (0.65%)	2.74±1.26
Q11	202 (32.58%)	285 (45.97%)	93 (15%)	16 (2.58%)	22 (3.55%)	2 (0.32%)	1.99±0.97
Q12	57 (9.19%)	88 (14.19%)	94 (15.16%)	159 (25.65%)	148 (23.87%)	74 (11.94%)	3.76±1.48
Q13 R	20 (3.23%)	67 (10.81%)	138 (22.26%)	119 (19.19%)	172 (27.74%)	104 (16.77%)	2.92±1.37
Q14 R	71 (11.45%)	148 (23.87%)	105 (16.94%)	92 (14.84%)	151 (24.35%)	53 (8.55%)	3.57±1.55
Q15 R	18 (2.90%)	62 (10%)	59 (9.52%)	42 (6.77%)	219 (35.32%)	220 (35.48%)	2.32±1.43
Q16	134 (21.61%)	297 (47.90%)	129 (20.81%)	38 (6.13%)	16 (2.58%)	6 (0.97%)	2.23±1.00
Total Mean Score							47.98±10.58

Table 2: MAKS

Q.No	Agree strongly	Agree slightly	Neither Agree nor disagree	disagree slightly	disagree strongly	don't know	Mean±Std Dev
Q1	165 (26.61%)	217 (35%)	146 (23.55%)	16 (2.58%)	20 (3.23%)	56 (9.03%)	3.79±0.97
Q2	286 (46.13%)	254 (40.97%)	38 (6.13%)	12 (1.94%)	10 (1.61%)	20 (3.23%)	4.28±0.83
Q3	230 (37.10%)	273 (44.03%)	76 (12.26%)	18 (2.90%)	14 (2.26%)	10 (1.61%)	4.1±0.90
Q4	418 (67.42%)	148 (23.87%)	42 (6.77%)	0 (0%)	8 (1.29%)	4 (0.65%)	4.56±0.74
Q5	200 (23.26%)	256 (41.29%)	102 (16.45%)	32 (5.16%)	16 (2.58%)	14 (2.26%)	3.95±0.97
Q6 R	95 (15.32%)	208 (33.55%)	93 (15%)	114 (18.39%)	100 (16.13%)	10 (1.61%)	2.86±1.32
Q7	429 (69.19%)	140 (22.58%)	30 (4.84%)	10 (1.61%)	6 (0.97%)	5 (0.81%)	4.57±0.75
Q8 R	194 (31.29%)	194 (31.29%)	92 (14.84%)	40 (6.45%)	97 (15.65%)	3 (0.48%)	2.43±1.39
Q9	541 (87.26%)	55 (8.87%)	14 (14%)	2 (0.32%)	4 (0.65%)	4 (0.65%)	4.81±0.55
Q10	538 (86.77%)	56 (9.03%)	14 (2.26%)	6 (0.97%)	2 (0.32%)	5 (0.81%)	4.8±0.556
Q11	360 (58.06%)	162 (26.13%)	52 (8.39%)	18 (2.90%)	24 (3.87%)	4 (0.65%)	4.31±1.01
Q12 R	209 (33.71%)	209 (33.71%)	74 (11.94%)	37 (5.97%)	79 (12.74%)	12 (1.94%)	2.3±1.33
Total Mean Score							46.82±4.18

DISCUSSION

In our study negative attitudes were noted in seeking knowledge aboutmental health, disclosure of mental illness, dangerousness and the need of public protection from people with mental illness and towards the expectation of general practitioners to complete a thorough assessment for people with psychiatric illness.

- Junior residents had felt that psychiatrists know more about the lives of people treated for mental illness than do family members or friends
- The mean scores of MICA in our study are in concordance with the study conducted by Naga Chaitanya Duggirala et al,[6] Avisha Mahla et al,[7,8] M. Vijay Kumar et al,[9] Nishad P M A et al,[10] G.Aruna et al,[11] ras ali khaima et al,[12] suhaila ghuloum et al,[13] showing a high prevalence of stigma toward mental illness. Mean Mica score was 51.67 (SD=7.88) in a study conducted by Jie Li, Xiao-Ling Duan et al,[14] indicating more negative attitudes than our present study
- Mean MICA scores was (56.99±9.59) in a study conducted by swathi singh et al,[15] among non-psychiatric post graduates indicating more negative attitudes
- In a study conducted by Moayyad Alsalem et al,[16] out of 407 respondents 30 %lacked adequate knowledge and 45 %displayed unfavourable attitudes of HCP'S
- In a study conducted by V.Sujaritha et al,[17] using OMICC (Opinion About Mental Illness in Chinese Community)only 25% of the doctors showed positive attitudes
- The present study is not in line with the study conducted by Afiz Ashraf Mohammed et al,[18] where the attitudes were found to be positive on ATP-30 questionnnaire.
- In a study conducted by Yumni Minty et al.[19] The majority (> 50%) of the participants had a positive attitude towards mental illness
- Susmita Chandramouleeswaran et al,[20] conducted a study using AMIQ which demonstrated negative attitude towards patients with schizophrenia. Stigma has been associated with low knowledge about mental health disorders. Higher educational levels correlate to less prejudice and segregation towards mentally ill patients
- The mean score of the population was 47±4.180.
- The score in our study was in concordance with the study conducted by naga chaitanya duggiralla et al,[6] (43.82±2.59)
- Among the respondents, 62.58% and 67.41% misidentified stress and grief as mental disorders respectively which implies that non-psychiatric clinicians may still need some additional training on the types of mental disorders and factors that may predispose an individual to mental illness.
- In a study conducted by Yumni Minty et al,[19] majority of participants had an adequate level of knowledge of mental illness.
- In contrast to our study low knowledge was found in a study conducted by G.Aruna et al,[11] Jie Li , et al,[14] where the mean MAKS score was, 22.72 (SD=2.56) and avisha mahla and rakesh Gandhi,[7] where the mean MAKS score was 24 +/-3.

CONCLUSION

To conclude, the present study revealed that , though knowledge is high more than half of the Junior residents have stigmatizing attitudes towards people with mental illness which demonstrates the need to educate all students and doctors about psychiatric disorders, for which we may use

interventions such as discussions, talks, awareness sessions in class and tutorials to replace myths about mental illness with accurate conceptions and to challenge public attitudes about mental illness persons by direct interactions with the people having these disorders

Limitations

- study was conducted in only one state so the study results might not be generalized.
- Association with other variables like sociodemographic charactersitics of the sample was not taken into consideration in the present study

Future Directions

- Multicentric comparative studies can be conducted which includes sample with no medical background and taking into consideration of association with other variables.

REFERENCES

1. Steel Z, Marnane C, Iranpour C, Chey T, Jackson JW, Patel V et al. The global prevalence of common mental disorders: a systematic review and meta-analysis 1980–2013. International journal of epidemiology. 2014 Apr 1;43(2):476-93.
2. Abi Doumit C, Haddad C, Sacre H, Salameh P, Akel M, Obeid S et al. Knowledge, attitude and behaviors towards patients with mental illness: Results from a national Lebanese study. PloS one. 2019 Sep 16;14(9): e0222172.
3. Thornicroft G. Stigma and discrimination limit access to mental health care. Epidemiology and Psychiatric Sciences. 2008 Mar;17(1):14-9
4. Evans-Lacko S, Little K, Meltzer H, Rose D, Rhydderch D, Henderson C. Development and psychometric properties of the mental health knowledge schedule. The Canadian Journal of Psychiatry. 2010 Jul;55(7):440-8.
5. Kassam A, Glozier N, Lesse M, Henderson C, Thornicroft G. Development and responsiveness of a scale to measure clinicians' attitudes to people with mental illness (medical student version). Acta Psychiatrica Scandinavica.2010; 122: 153-161.
6. Duggirala NC, Settem VVJ, Koilada P, Chandra TJ. Impact of Anti-stigma Educational Intervention about Mental Illness among Medical Students: A Quasi-experimental Study.J Clin of Diagn Res.2023; 17(5):VC06-VC09.
7. Mahla A, Gandhi R. Knowledge, attitude and behaviour towards mental illness among non-psychiatric clinicians in a tertiary care teaching hospital. Journal of Positive School Psychology. 2022 Aug 18;6(8):4412-21.
8. Mahla A, Gandhi R. A Comparative Study of Knowledge, Attitude and Behavior Towards Mental Illness Between Consultants and Resident Doctors of Various Medical Specialities in A Tertiary Care Teaching Hospital. Journal of Positive School Psychology. 2022 Aug 18;6(8):4422-9
9. Kumar MV, Macharapu R, Reddy PK, Babu S. Attitude toward mental illness among medical students and nonpsychiatric doctors. Archives of Mental Health. 2019 Jan 1;20(1):9-13.
10. Nishad PM, Dilshana NB, Kakunje A, Karkal R, Chisty MK. Attitude of non-mental health professionals towards the mental illness in a tertiary care center. Indian Journal of Mental Health and Neurosciences. 2019 Jul 1;2(2):23-8.
11. Aruna G, Mittal S, Yadiyal MB, Acharya C, Acharya S, Uppulari C. Perception, knowledge, and attitude toward mental disorders and psychiatry among medical undergraduates in Karnataka: A cross-sectional study. Indian journal of psychiatry. 2016 Jan 1;58(1):70-6.
12. Salama RA, Tadroos TM, Sikandar I, Ashraf A, Khan A. Attitudes of healthcare professionals towards mental illness: a survey study in ras al khaimah. Open Journal of Psychiatry. 2021 May 12;11(3):160-73.
13. Ghuloum S, Mahfoud ZR, Al-Amin H, Marji T, Kehyayan V. Healthcare Professionals' attitudes toward patients with mental illness: a cross-sectional study in Qatar. Frontiers in psychiatry. 2022 May 16; 13:884947.
14. Li J, Duan XL, Zhong HQ, Chen W, Evans-Lacko S, Thornicroft G. Cross-sectional study of mental health related knowledge and attitudes among care assistant workers in Guangzhou, China. International journal of mental health systems. 2021 Dec; 15:1-9.
15. Singh, Swati & Pradeep, Arun & Dinakaran, Vadivambal & Ramachandran, Saravanan A & Thirunavukarasu M. Attitude towards psychiatry among nonpsychiatric postgraduates in a tertiary care teaching hospital. Global journal for research analysis.2021; 204-207.
16. AlSalem, M., Alamri, R., & Hejazi, S. Nonpsychiatric Healthcare Professionals' Attitudes Toward Patients with Mental Illnesses in Makkah City, Saudi Arabia: A CrossSectional Study. Neuropsychiatric Disease and Treatment.2020; 16: 341–348.
17. Sujaritha V, Partheeban M, Thiviya T, Sowmiya M. Attitude towards mental illness among doctors and nurses in a tertiary care centre, Pondicherry, India. Int J Res Med Sci. 2017 Jun 24;5(7):3059-64.
18. Mohammed AA, Vinila C, Alam A, Arthur M, Bandla S, Sultana Z, Gopalaswamy SG, Kishore KK, Balasubrahmanyan S. Attitude towards mental health among postgraduate students and house surgeons in a tertiary teaching hospital at Kancheepuram: a questionnaire based study. Archives of Mental Health. 2013 Jan 1;14(1):33-6.
19. Minty Y, Moosa MY, Jeenah FY. Mental illness attitudes and knowledge in nonspecialist medical doctors working in state and private sectors. South African Journal of Psychiatry. 2021 May 31; 27:1592.
20. Chandramouleeswaran S, Rajaleelan W, Edwin NC, Koshy I. Stigma and attitudes toward patients with psychiatric illness among postgraduate Indian physicians. Indian journal of psychological medicine. 2017 Nov;39(6):746-9.