



A Comparative Study of Attitudes towards Mental Illness in Nursing Personal

Authors

Dr M.Vijaya Lakshmi¹, MD, DPM, Dr T.Suryanarayana Raju²MD

Dr V.Manasa Ram³ (MD)

^{1,2}Assistant Professor, ³Resident

Department of Psychiatry, Andhra Medical College, Visakhapatnam, Andhra Pradesh

ABSTRACT

CONTEXT: *Persistent negative attitudes and social rejection of people with mental illness prevailed in every social, religious and cultural aspects. Studies suggested that experience due to contact and education about treatment of illness might decrease negative attitudes.*

AIM: *To compare attitudes towards mental illness between nursing staff of psychiatric and non-psychiatric hospitals.*

SETTINGS AND DESIGN: *This is a cross sectional comparative study done in government hospitals, Visakhapatnam.*

MATERIALS AND METHODS: *A sample of 122 government nursing staff were taken and COMMUNITY ATTITUDES TOWARDS MENTAL ILLNESS scale was applied.*

STATISTICS: *Data was analyzed using statistical package for social sciences version 16.*

RESULTS: *Nursing staff of psychiatric hospital has more favorable attitudes towards mental illness compared to other group, and it was statistically significant.*

CONCLUSION: *Nursing staff of psychiatric hospitals showed more positive attitudes towards mental illness than the other group probably because of their experience and education about mental health.*

INTRODUCTION

Attitudes are likes or dislikes, favorable or unfavorable evaluation and reactions to objects people, situation or other aspects of the world including abstract and social policies. Attitudes developed early in childhood, later on in life are continuously modified by society and media. Attitudes can be regarding cause of mental illness? Is it like any other illness? How mentally ill differ from others? Do they need restraints, need hospitalization? Mental hospitals or prisons? Restrictions in responsibilities, rights, marriage and child birth? Community mental health services? Mental health provision in neighborhood?

Stigma has been defined as the negative effect of a label¹ and a product of disgrace that sets a person apart from others². Stigma towards mental illness is both longstanding and wide spread phenomenon^{2,3} still detrimental to people with mental illness⁴. Stigma has both internal and external consequences. The internal consequences include decrease in self-esteem, increase in shame, fear and avoidance^{2,4,5}. The external consequences include exclusion, discrimination, prejudice^{2,4,5}. Stigma is also associated with medication noncompliance⁶.

According to labeling theory, person with mental illness tend to internalize the label which increase upset feelings and strengthen the symptoms⁷. A

modification of labeling theory of mental illness posits that, negative labels engender self-devaluation and negative attitudes, increases one's vulnerability to mental illness.^{4,8}

Stigma due to lack of education about mental illness is another obstacle for the identification and implementation of various modes of treatments practiced in psychiatry. Knowledge about mental illness and education might improve attitudes about mental illness.^{9,10} Studies showed that attitudes of health professionals towards adults with mental illness was influenced by various factors including contact, experience¹¹, education and training^{9,10}. Previously a study was done in Government hospital for mental care, Visakhapatnam, in which nursing staff showed negative attitude towards mental illness saying that the cause of mental illness as witches and black magic and believed in faith healers for management³⁹. This study is planned to assess knowledge regarding mental illness in nursing faculty of different hospitals.

AIM

To compare attitudes towards mental illness between nursing staff of Government psychiatric and non-psychiatric hospitals.

Hypothesis

Nursing staff working in psychiatric hospitals have more positive attitude towards adults with mental illness compared to those working in non-psychiatric hospitals.

METHODOLOGY

This is a cross sectional comparative study done in Visakhapatnam. A total of 122 Government nursing staff was taken into the study by purposive sampling. The number of nursing faculty in Government hospital for mental care was 60 and that of Government hospital for chest and communicable diseases and Government ENT hospital was 62. Approval of Ethics Committee, Andhra medical college, Visakhapatnam has been taken for the study. After explaining about, the aim and purpose of the study, a written consent was taken in both English and Telugu from the

subjects. The questionnaires were read out and explained to them. They were given the questionnaires, and asked to return back after answering in a stipulated time of about 1 hour.

TOOLS

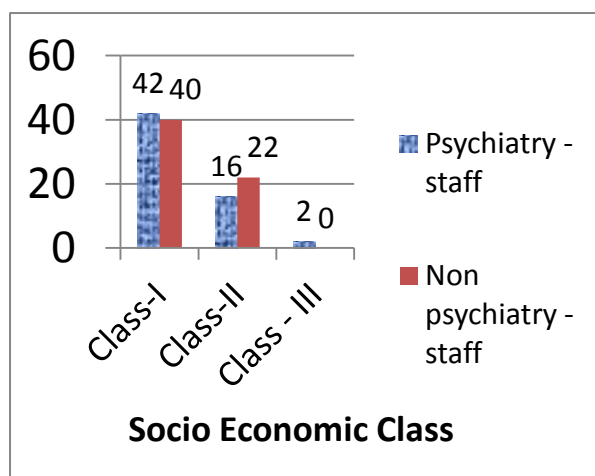
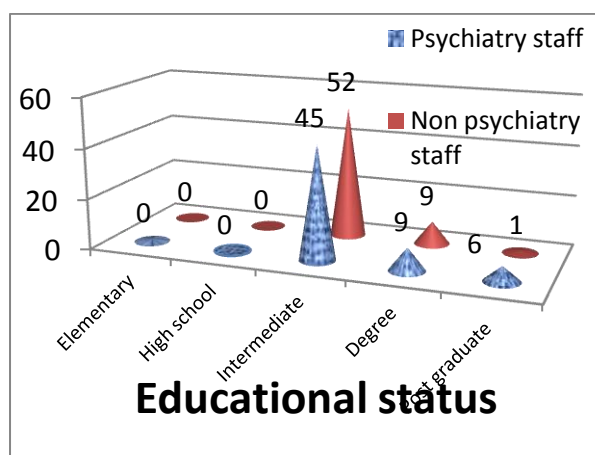
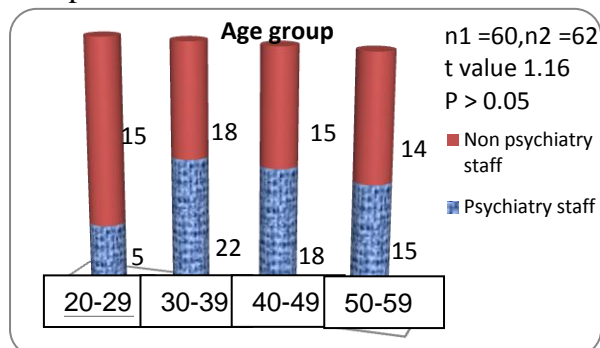
The questionnaires consisted of two sections A and B with close-ended questions. Section A- socio-demographic data. Section B- assessed the attitudes towards mental illness using *Community Attitudes toward the Mentally Ill* (CAMI) scale. The CAMI was developed by using the two most widely used scales, the Opinions about Mental Illness scale and the Community Mental Health Ideology scale (Taylor and Dear 1981¹²). The questionnaire consists of 40 statements, each requiring a rating of the participant's degree of agreement/disagreement on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). The CAMI yields four attitude factor scores, each calculated by adding the ten relevant items after reverse scoring of some of the questions and then dividing by ten to obtain a mean score for each of the four factors.

1. **Authoritarianism:** It measures sentiments regarding the need to hospitalize those with mental illness, the difference between people with mental illness and normal people and the importance of custodial care.
2. **Benevolence:** It addresses sentiments such as the responsibility of society to those experiencing mental illness, the need for sympathetic, kindly attitudes, and willingness to become personally involved.
3. **Social Restrictiveness:** reflects a view of the mentally ill as a threat to society, the need to maintain social distance and the lack of responsibility on the part of mentally ill people.
4. **Community Mental Health Ideology (CMHI):** reflects a view that recognizes the therapeutic value of the community and acceptance of de-institutionalized care

¹²

Statistical Analysis

Responses of the negatively worded items were reversed before data analysis. The data were analyzed using the SPSS version 16. Descriptive statistics and unpaired t -test were used to interpret the data.



RESULTS

Among the 122 participants 60 were working as nursing faculty in Government hospital for mental care and 62 were nursing faculty from Government hospital for chest and communicable diseases and Government ENT hospital. All the

participants were females. Mean age of the sample was 42 in nursing staff of psychiatric and 40 in nursing staff of non-psychiatric group with no significant difference. Nearly 80 % of non-psychiatric staff and 75 % psychiatric staff are educationally qualified with intermediate and 15% were graduates in both the groups. Socioeconomic status (Kuppu Swamy 2012³³) was Class I in 70 % psychiatry staff and 64.52 % in non- psychiatry staff with no statistically significant difference between the two groups ($P > 0.05$).

Authoritarian subscale-

Mean score of psychiatric staff was 30.38 and non-psychiatric staff was 31.96 with a significant difference between the two groups ($p < 0.05$) indicating that non-psychiatric group has more authoritarian attitude. Alternate hypothesis is accepted.

Benevolence Sub Scale

Mean score of psychiatric staff was 35.91 and non-psychiatric staff was 34.53 with statistical significance at 90% confidence interval only. Null hypothesis is accepted.

Social Restrictiveness Subscale

Mean score of psychiatric staff was 26.53 and non-psychiatric staff was 28.20 with a significant difference between the two groups ($p < 0.05$) indicating that non-psychiatric group has more social restrictive attitudes. Alternate hypothesis is accepted.

Community mental health ideology subscale

Mean score of psychiatric staff was 33.51 and non-psychiatric staff was 31.88 with a significant difference between the two groups ($p < 0.05$) indicating that psychiatric group has more positive attitude. Alternate hypothesis is accepted.

AUTHORITARIAN SUB SCALE-I (N₁=60,N₂=62)

Q. No-	SA1/ A1(%)	N1 (%)	SD1/ D2(%)	SA2/ A2(%)	N2 (%)	SD2/ D2(%)	\bar{X}_1	\bar{X}_2	SD ₁	SD ₂	T value	P value
A-1	29 (48.3)	5 (8.3)	26 (43.3)	49 (79)	2 (3.2)	11 (17)	3.16	4.08	1.29	1.41	3.83	P < 0.001
A-2	36 (60)	8 (13.3)	16 (26.7)	27 (43.55)	18 (29)	17 (27)	3.51	3.25	1.21	1.02	1.37	P > 0.05
A-3	36 (60)	11 (18.3)	13 (21.7)	50 (80.6)	6 (9.7)	6 (9.68)	3.46	3.91	1.03	0.83	-2.81	P< 0.01
A-4	43 (76.7)	6 (10)	11 (18.3)	36 (58)	13 (20.9)	13 (21.1)	3.76	3.67	1.11	1.29	0.43	P > 0.05
A-5	6 (33.3)	10 (16.7)	44 (73.3)	23 (37)	8 (12.9)	31 (51)	2.13	2.76	0.99	1.46	-2.86	P< 0.01
A-6	13 (18.3)	04 (6.67)	42 (70)	17 (27.4)	10 (16.3)	35 (56.5)	2.37	2.61	1.28	1.25	15	P < 0.001
A-7	30 (50)	17 (28.3)	13 (21.7)	19 (31)	18 (29.0)	25 (40.3)	3.4	2.91	1.06	0.92	2.88	P < 0.01
A-8	26 (43.3)	09 (15.0)	25 (41.7)	19(30)	08 (12.9)	35 (57.5)	3.11	2.58	1.20	1.40	2.66	P < 0.01
A-9	11 (33)	12 (20.0)	28 (46.7)	27(44)	10 (16.1)	25 (40.3)	2.86	3.20	1.18	1.39	-1.17	P > 0.05
A-10	14 (23.3)	08 (13.3)	38 (63.3)	26(45)	03 (4.84)	33 (53.3)	2.63	2.95	1.16	1.39	-1.10	P > 0.05
A total							30.4	31.9	4.80	3.89	-2.05	P < 0.05

BENOVELENCESUB SCALE-II (N₁=60,N₂=62)

Q. No-	SA1/ A1(%)	N1 (%)	SD1/ D2(%)	SA2/ A2(%)	N2 (%)	SD2/ D2(%)	\bar{X}_1	\bar{X}_2	SD ₁	SD ₂	t value	P value
B-1	33 (55)	15 (25.0)	12 (20)	23 (37)	25 (40.32)	14 (21.5)	3.45	3.20	1.03	1.03	1.39	P > 0.05
B-2	31 (51.7)	12 (20.0)	17 (28.3)	23 (37)	26 (41.93)	13 (20.2)	3.23	3.29	1.03	0.99	0.33	P > 0.05
B-3	50 (83)	02 (3.33)	8 (13.3)	51 (83)	07 (11.29)	4 (6.4)	3.96	4.21	0.97	0.94	1.47	P> 0.05
B-4	19 (31.7)	14 (23.3)	27 (45)	28 (45)	08 (12.9)	26 (42)	2.85	3.22	1.07	1.27	1.76	P < 0.10
B-5	56 (93)	01 (1.67)	3 (5)	53 (85.8)	06 (9.68)	3(4.8)	4.4	4.37	0.89	0.96	0.18	P > 0.05
B-6	47 (78.3)	10 (16.7)	3 (5)	34 (54.8)	12 (19.35)	16 (25)	4.13	3.35	0.87	1.36	3.91	P < 0.001
B-7	22 (36.7)	08 (13.3)	30 (30)	12 (19.5)	12 (19.35)	38 (61)	2.86	2.48	1.17	1.27	173	P < 0.10
B-8	39 (65)	08 (13.3)	13 (21.7)	31 (50)	14 (22.58)	17 (27)	3.58	3.32	1.09	1.43	1.15	P > 0.05
B-9	34 (56.7)	12 (20.0)	14 (23.3)	42 (67.8)	06 (9.67)	14 (22.6)	3.63	3.74	1.23	1.45	0.47	P > 0.05
B-10	40 (66.7)	17 (28.3)	3 (5)	28 (45.2)	22 (33.48)	12 (19.3)	3.8	3.42	0.87	1.12	3.64	P < 0.001
B total							35.91	34.53	4.62	4.35	1.74	P < 0.10

SOCIAL RESTRICTIVENESS SUB SCALE-III (N₁=60, N₂=62)

Q. No-	SA1/ A1(%)	N1 (%)	SD1/ D2(%)	SA2/ A2(%)	N2 (%)	SD2/ D2(%)	\bar{X}_1	\bar{X}_2	SD ₁	SD ₂	t value	P value
S-1	36 (60)	11 (18.3)	13 (21.7)	37 (59.7)	06 (9.68)	19 (31)	3.46	3.35	1.12	1.40	0.5	P > 0.05
S-2	17 (28.3)	14 (23.3)	29 (49.3)	12 (19.3)	21 (33.87)	29 (49)	2.68	2.66	1.06	0.97	0.66	P > 0.05
S-3	11 (18.3)	09 (15.0)	40 (66.8)	19 (30.6)	04 (6.45)	39 (63)	2.43	2.51	0.99	1.18	-0.42	P > 0.05
S-4	19 (31.7)	14 (23.3)	27 (45)	28 (44.2)	22 (35.48)	12 (19)	2.72	3.37	1.07	1.07	3.42	P < 0.001
S-5	56 (93.3)	01 (1.67)	3(5)	36 (58.3)	11 (17.74)	15 (24.2)	2.86	3.53	1.11	1.27	- 3.19	P < 0.01
S-6	47 (78)	10 (16.7)	3(5)	14 (22.57)	15 (24.19)	14 (22.8)	2.8	2.64	0.85	1.17	0.88	P > 0.05
S-7	22 (36.6)	08 (13.3)	30 (50)	12 (19.4)	08 (12.90)	42 (67.8)	2.53	2.43	1.18	1.22	0.48	P > 0.05
S-8	39 (55)	08 (13.3)	13 (21.7)	4(6.5)	08 (12.9)	50 (80.6)	2.00	1.85	0.97	0.93	0.93	P > 0.05
S-9	34 (56.7)	12 (20.0)	14 (23.3)	18 (29.5)	11 (17.74)	33 (53.2)	2.03	2.77	0.95	1.19	- 3.89	P < 0.001
S-10	19 (31.7)	22 (36.7)	19 (31.7)	26 (42)	04 (6.45)	32 (51.6)	3.00	2.90	1.02	1.38	0.47	P > 0.05
S total							26.5	28.20	4.80	3.23	2.32	P < 0.05

COMMUNITY MENTAL HEALTH IDEOLOGY SUB SCALE-IV (N₁=60, N₂=62)

Q. No-	SA1/ A1(%)	N1 (%)	SD1/ D2(%)	SA2/ A2(%)	N2 (%)	SD2/ D2(%)	\bar{X}_1	\bar{X}_2	SD ₁	SD ₂	t value	P value
C-1	55 (81.7)	01 (1.67)	4 (6.67)	45 (72.5)	06 (9.68)	45 (72.5)	4.03	3.75	0.68	1.08	1.75	P < 0.10
C-2	46 (75.1)	05 (8.33)	9 (15)	52 (83.9)	07 (11.29)	3 (4.83)	3.81	4.12	1.17	0.85	- 1.72	P < 0.10
C-3	56 (93.3)	02 (3.33)	2(3.3)	33 (53.5)	25 (40.32)	4 (6.4)	4.16	3.5	0.71	0.74	5.08	P < 0.001
C-4	24 (40)	17 (28.3)	19 (31.7)	29 (46.8)	16 (25.81)	17 (27.4)	3.1	3.17	1.03	0.93	0.41	P > 0.05
C-5	42 (70)	08 (13.3)	10 (16.7)	31 (50)	12 (19.35)	19 (30.6)	3.58	3.16	0.94	1.08	2.33	P < 0.05
C-6	33 (54.9)	10 (16.7)	17 (28.3)	33 (53.2)	17 (27.42)	12 (19.4)	3.3	3.32	1.03	1.17	0.10	P > 0.05
C-7	12 (20)	16 (26.7)	32 (53.3)	7 (12.9)	09 (14.52)	45 (72.6)	2.7	2.11	0.97	0.92	3.68	P < 0.001
C-8	20 (33.3)	10 (16.7)	30 (50)	14 (22.6)	20 (32.26)	28 (45.3)	2.85	2.74	1.03	0.95	0.65	P > 0.05
C-9	26 (33.3)	21 (35.0)	13 (21.7)	22 (35.4)	18 (29.03)	22 (35.5)	3.28	3.06	1.04	1.18	1.16	P > 0.05
C-10	23 (38.3)	10 (16.7)	27 (45)	18 (28)	18 (29.03)	26 (42)	2.88	2.92	1.09	1.02	-0.22	P > 0.05
C total							33.5	31.88	5.32	3.37	-2.08	P < 0.05

DISCUSSION

The major purpose of this study was to investigate attitudes of staff nurses working in government psychiatric and non-psychiatric hospitals towards adults with mental illness. There existed a need for a study that replicated and extended earlier studies⁸. A few studies in India investigated attitudes towards mental illness^{13,14} which focused mainly on comparing the effectiveness of the mental health course on

attitudinal change toward mentally ill. The present study used a standardized multi-dimensional questionnaire that helps us to identify both the negative and positive aspects of the attitudes, to intervene, reinforce and enhance the attitudes and to provide holistic care to persons with mental illness.

Previously a study was done in Government hospital for mental care, Visakhapatnam, in which nursing staff showed negative attitude towards

mental illness saying that the cause of mental illness as witches and black magic and believed in faith healers for management³⁹. Contrary to this in our study it was hypothesized that there would be a significant difference in attitudes towards mental illness between nursing staff of psychiatric and non-psychiatric hospitals correlating with previous studies^{8,15}. In this study psychiatric nursing group has less authoritarian attitude, similar to other researches^{8,15,16}, which showed those working in mental health field has more favorable attitudes. In present study, a few of participants from both the groups (27%) disagreed that all people with mental illness have some strange behavior, similar to other studies.^{17,19}

In Benevolence subscale both the groups has low scores indicating negative attitudes. These results were contrary to studies done in the past³⁴. Literature^{8,21,22} indicated that many mental health professionals feel hopeless or helpless and have negative attitudes towards adults with mental illness in order to cope with and protect themselves from the challenges of working with adults with mental illness. A study reported that those who had previous contact with the mentally ill held informed and enlightened views.²³ Negative attitude to mental illness, in the present study, support the hypothesis that negative attitudes toward the mentally ill are fuelled by a lack of knowledge²⁴.

Social restrictiveness subscale mean scores in our study indicated that non-psychiatric group has more socially restrictive attitudes. These results substantiate⁹ the comment that fear is the most common emotional reaction to people with mental illness. Although most of the participants support isolation of a person with mental illness from the society, restrictive attitude was observed in half of the sample with regards to marriage or child bearing. This finding corroborates with findings of previous studies^{13,14}. Consistent findings were also presented with the study conducted by Ganesh et.al.²⁷ Non psychiatric participants are pessimistic when it comes to career or job opportunity for a person with mental illness. This socially

restrictive attitude is reflected in the practices of community toward psychiatric ill patients in the form of restricting visits to patient's home and ignoring the patients.

In the era of economic and social development, community still approaches Tantric/ black magic for cure of mental illness. Non psychiatric staff reported restrictive, stereotyping, pessimistic, and non-stigmatizing attitude toward patient with mental illness that can be the barrier in health-seeking behavior for mental illnesses.⁴¹ This study represent that significantly 55% of psychiatric staff endorse that a mentally ill person can hold the responsibilities which is consistent with a survey³⁹ conducted by department of health England.

In Community mental health ideology subscale mean score of psychiatric staff was 33.51 and non-psychiatric staff was 31.88 with a significant difference between the two groups ($p < 0.05$) indicating that psychiatric group has more positive attitude. Research had shown that certain kinds of exposure to mental illness can be beneficial,^{28,29} could be that the right kind of exposure has a cumulative effect of increasing levels of positive attitude (Benevolence and community mental health ideology) and decreasing levels of negative attitudes (Authoritarianism and social restrictiveness).

The present study findings showed that nursing faculty of psychiatric hospitals had significant positive attitudes toward mental illness in three of the four attitudes factors: Authoritarianism; Social restrictiveness and Community mental health ideology;^[30] However, stigma related to mental illness is an international concern and a long-standing challenge for research to understand its basis, mechanisms and consequences in order to be able to formulate means by which stigma and its impact may be ameliorated^[31]

LIMITATIONS

As the sample size is small, so the results cannot be generalized. Comparison was done with nursing staff working in tertiary level specialty hospitals only and not with those working

intertary general hospitals. Interventional study would have been better rather than a cross sectional study. Staff nurses working in community hospitals are not included in the present study.

CONCLUSION

The present study showed the psychiatric staff has significant positive attitudes toward mental illness in three of the four attitudes factors: Authoritarian, Social Restrictiveness, and Community mental health ideology compared to other group. These findings have important implications for nursing training and academic education in this area, supporting the positive effect of mental health training and experience on stigmatizing attitudes. On the basis of the data collected and analyzed any experience and exposure to mentally ill while undergoing educational and training programme might change negative attitudes and reduce the stigma. So early recognition and early referral of these patients for psychiatric treatment might enhance the wellbeing of these subjects and their easy mingling into society.

REFERENCES

1. Hayward, P. & Bright, J. (1997). Stigma and mental illness: A review and critique. *Journal of Mental Health*, 6, 345-354.
2. Byrne, P. (2001). Psychiatric stigma. *British Journal of Psychiatry*, 178, 281-284
3. Crisp, A., Gelder, M., Rix, S., Meltzer, H., & Rowlands, O. (2000). Stigmatization of people with mental illness. *British Journal of Psychiatry*, 177,4-7
4. Link, B. G. (1987). Understanding labeling effects in the area of mental disorders: An assessment of the effects of expectations of rejection. *American Sociological Review*, 52, 96-11
5. Corrigan, P., & Watson, A. C. (2007). The stigma of psychiatric disorders and the gender, ethnicity, and education of the perceiver. *Community Mental Health Journal*, 43(5), 439-458.

6. Sirey, J., Bruce, M., Alexopoulos, G., Perlick, D., Friedman, S., & Meyers, B. (2001). Perceived stigma and patient-rated severity of illness as predictors of antidepressant drug adherence. *Psychiatric Services*, 52, 1615-1620.
7. Scheff, T. J. (1974). The labelling theory of mental illness. *American Sociological Review*, 39, 444-452.
8. Cohen, J. & Struening, E. L. (1962). Opinions about mental illness in the personnel of two large mental hospitals. *Journal of Abnormal Social Psychology*, 64, 349-360.
9. Bairan, A. & Farnsworth, B. (1989). Attitudes towards mental illness: Does a psychiatric nursing course make a difference? *Archives of Psychiatric Nursing*, 3, 351-357.
10. Penny, N., Kasar, J., & Sinay, T. (2001). Student attitudes toward persons with mental illness: The influence of course work and level I fieldwork. *The American Journal of Occupational Therapy*, 55, 217-220.
11. Procter, N. & Hafner, J. (1991). Student nurses' attitudes to psychiatry: the influence of training and personality. *Journal of Advanced Nursing* 16, 845-849.
12. Taylor, S. M., & Dear, M. (1981). Scaling community attitudes toward the mentally ill. *Schizophrenia Bulletin*, 7, 225-240.
13. Singh AJ, Shukla GD, Verma BL, Kumar A, Srivastava RN. Attitude of Indian urban adults towards mental illnesses. *Indian J Public Health*. 1992;36:51-4
14. Kermode M, Bowen K, Arole S, Pathare S, Jorm AF. Attitudes to people with mental disorders: A mental health literacy survey in a rural area of Maharashtra, India. *Soc Psychiatry Psychiatr Epidemiol*. 2009; 44:1087-66
15. Nordt, C., Rossler, W., & Lauber, C. (2006). Attitudes of mental health professionals toward people with

- schizophrenia and major depression. Schizophrenia Bulletin, 32, 709-714.
16. Lauber, C., Anthony, M., Ajdacic-Gross, & Rossler, W. (2004). What about psychiatrists' attitude to mentally ill people? European Psychiatry, 19, 423-427.
 17. Poreddi V, Reddemma K, Math SB. People with mental illness and human rights: A developing countries perspective. Indian J Psychiatry 2013;55:117-24
 18. Chong SA, Verma S, Vaingankar JA, Chan YH, Wong LY, Heng BH. Perception of the public towards the mentally ill in a developed Asian country. Soc Psychiatry Psychiatr Epidemiology. 2007; 42:734-9
 19. Ng SL, Martin JL, Romans SE. A community's attitudes towards the mentally ill. N Z Med J. 1995;108:505-8
 20. SMITH, ALLISON L., Ph.D. An Investigation of Attitudes Towards Adults with Mental Illness Among Mental Health Professionals In-training, Non Mental Health Professionals In-training, Mental Health Professionals, and Non Mental Health Professionals. (2008)
 21. Minkoff, K. (1987). Resistance of mental health professionals to working with the chronic mentally ill. New Direction for Mental Health Services, 33, 3-20.
 22. Mirabi, M., Weinman, M. L., Magnetti, S. M., & Keppler, K. N. (1985). Professional attitudes toward the chronic mentally ill. Hospital and Community Psychiatry, 36, 404- 405.
 23. Ng SL, Martin JL, Romans SE. A community's attitudes towards the mentally ill. N Z Med J. 1995;108:505-8.
 24. Wolff G, Pathare S, Craig T, Leff J. Community knowledge of mental illness and reaction to mentally ill people. Br J Psychiatry. 1996;168:191-8.
 25. Prabhu HR, Singh H. Attitude towards psychiatric referral. Indian J Psychiatry. 2001;43:57-9.26.
 26. WorldHealth Report. Mental Health: New understanding, New Hope. Geneva, Switzerland World Health Organization ; 2001
 27. Ganesh K. Knowledge and Attitude of mental illness among general public of southern India. National Journal of community medicines 2011;2(1):175-78.
 28. Corrigan, P. (2004). Target- specific stigma change: A strategy for impacting mental illness stigma. Psychiatric Rehabilitation Journal, 28, 113-121.
 29. Crisp, A., Gelder, M., Rix, S., Meltzer, H., & Rowlands, O. (2000). Stigmatisation of people with mental illness. British Journal of Psychiatry, 2000:177;4-7
 30. Perlick, D., Rosenheck, R., Clarkin, J., Sirey, J., Salah, J., Struening, E., & Link, B. (2001). Adverse effects of perceived stigma on social adaptation of persons diagnosed with bipolar affective disorder. Psychiatric Services, 52, 1627-1632.
 31. Hugo CJ, Boshoff DE, Traut A, Zungu-Dirwayi N, Stein DJ. Community attitudes toward and knowledge of mental illness in South Africa. Soc Psychiatry Psychiatric Epidemiology. 2003;
 32. Procter, N. & Hafner, J. (1991). Student nurses' attitudes to psychiatry: the influence of training and personality. Journal of Advanced Nursing 16, 845-849.
 33. kuppuswamy socio economic scale 2012.
 34. Gureje, O., Lasebikan, V., Ephraim-Oluwanuga, O., Olley, B., & Kola, L. (2005). Community study of knowledge of and attitude to mental illness in Nigeria. British Journal of Psychiatry, 186, 436-441. H
 35. Wallach, H. (2004). Changes in attitudes towards mental illness following exposure. Community Mental Health Journal, 40, 235-248.
 36. Pande V, Saini R, Chaudhury S: Attitude toward mental illness amongst urban non-psychiatric health professionals. Ind Psychiatry J 2011, 20(1):17-20

37. V. Pande, Rajiv Saini, and Suprakash Chaudhury Attitude toward mental illness amongst urban non-psychiatric health professionals Ind Psychiatry J. 2011 Jan-Jun; 20(1): 17–20.
38. Rajesh Kumar et al Attitude to People with Mental Illness: A Mental Health Literacy Survey from Punjab State International Journal of Health Sciences & Research (www.ijhsr.org) 135 Vol.3; Issue: 12
39. Ranjitkumar P, Padma V, Raju NN A comparative study on attitudes towards mental illness AP J Psychological Medicine Vol. 11 Aug-Dec 2010
40. Harshal Salve et al Perception and Attitude towards Mental Illness in an Urban Community in South Delhi – A Community Based Study Indian J Psychol Med. 2013 Apr-Jun; 35(2): 154–158.
41. Hamaideh SH, Mudallal R. Attitudes of Jordanian nursing students towards mental illness: the effect of teaching and contact on attitudes change. Coll Stud J 2009;43:2.
42. Poreddi, *et al.*: Nursing students attitudes towards mental illness Indian Journal of Psychological Medicine | Oct - Dec 2014 | Vol 36 |