# Public Attitude towards Mental Illness in Bangalore: An Exploratory Study

Geetha P Menon,\* T Murali† and Kiran Rao‡

#### **Abstract**

The aim of the present study was to examine the attitudes towards people with mental illness in the city of Bangalore. The sample consisted of 400 people living in different parts of the city. They were assessed on sociodemographic data sheet, Orientation to Mental Illness Scale, Exposure, Knowledge and Social Distance Scale and Attitudes towards Mental Illness Scale. The Data collected were analyzed using descriptive statistics, Chisquare test, Student t-test, ANOVA, ANCOVA, Pearson's correlation and Step-wise Multiple Regression Analysis. The study reveals that the common man had neutral orientation to mental illness and is moderate in their attitudes to mental illness. However, many were not informed regarding legal provisions available for the mentally ill and rehabilitation services existing in the community. Although the public was fairly low on social distance, this did not apply to intimate relationships such as sharing a room or marriage. Socio-demographic factors, especially like that of education, had an impact on the attitudes of many to mental illness, with the higher educated being better aware and more positive towards

<sup>\*</sup> Lecturer, Richmond Fellowship Postgraduate College of PSR & C, Bangalore, Karnataka, geethamu@gmail.com.

<sup>&</sup>lt;sup>†</sup> Prof. and Head (retd), Department of Psychiatric and Neurological Rehabilitation, National Institute of Mental Health and Neuro Sciences (NIMHANS), Bangalore, Karnataka, muralithyloth@gmail.com

<sup>&</sup>lt;sup>‡</sup> Professor (retd), Department of Mental Health and Social Psychology, National Institute of Mental Health and Neuro Sciences (NIMHANS), Bangalore, Karnataka, kiranrao.nimhans@gmail.com

the mentally ill. The study brings out the need for programmes to raise the awareness among the ordinary citizen on various aspects of mental illness including existing legal provisions for the mentally ill in the community and rehabilitation services.

Keywords: Public attitude, rehabilitation, mental illness

# Introduction

De-institutionalization, which began in the 1950s in the Western world, resulted in the discharge of many persons with long-term mental illness from various state hospitals. It was assumed that by keeping the patient out of the hospital, they will be kept in the community and if it did not immediately cure them, it would at least avoid the dehumanizing process of institutionalization (Kirk & Therrien, 1975). In practice, however, de-institutionalization consisted of three component processes; the release of persons residing in psychiatric hospitals to alternative facilities in the community, the diversion of potential new patients to alternate facilities, and the development of special services for the care of the non-institutionalized mentally ill (Bachrach, 2000). The last of these processes is particularly important, because it assumed that the altered life circumstances of these persons would inevitably result in new configurations of service needs and a better quality of life.

Availability of psychiatric services does not guarantee their utilization. Crucial to their utilization are the community's attitude towards mental illness, the level of knowledge about mental illness and the culturally sanctioned practices regarding mental illness. Successful community reintegration depends on the existence of a tolerant and supportive community environment. Since negative and stigmatizing public attitudes toward the mentally ill have direct implications on prevention, early detection, rehabilitation and quality of life, it is important to evaluate, understand, and ultimately influence the popular attitude towards the mentally ill (Rosenfield, 1997).

In India, as in other parts of the world, the traditional approach to the care of the mentally ill during the last 200 years was custodial rather than therapeutic. This approach to psychiatric care delivery system was transplanted to India from Britain. Mental hospitals were constructed in isolated areas with the aim of segregating those who were insane and considered troublesome and dangerous to their neighbours. The main concern was to protect the citizens without regard for appropriate care and welfare of the patients.

The inevitable fallout of this system was due to the poor quality of care in mental hospitals. Besides, custodial institutions evoked strong images of fear and stigma. Among the earliest attempts to combat these negative perceptions was to encourage social service and religious organizations to organize activities in the hospitals. With the decline of the mental hospital and the simultaneous development of the acute psychiatric units in general hospitals, the delivery of mental health services was provided through the existing network of primary health care. At one level this was an attempt to overcome the lack of professionals and resources to provide specialized services and, on the other, to foster an opportunity to organize mental health services in a manner that avoids isolation, stigma and discrimination (Murthy, 2001).

### Review of Literature

Community perceptions have always been an important yardstick in understanding the quality of life of the mentally ill. Negative perceptions are usually accompanied by rejecting attitudes towards the mentally ill. To the average man, a person becomes a patient when he enters a psychiatric hospital. The label of mental illness thus once given sticks to the individual. Furthermore, community attitudes and beliefs play a huge role in help seeking behaviour and successful treatment of the mentally ill (Wolff, Pathare, Craig & Leff, 1996).

European studies in this area have looked at the knowledge of the people towards schizophrenia and depression (Ozmen et al., 2005), levels of social distance to the mentally ill (Van't, Kraan, Drosseart & Modde, 2006) and effects between stigmatization and social ties (Mueller, Nordt, Lauber, Meyer & Roessler, 2006). However, the German studies are large scale representative surveys on attitudes which are more or less considered land mark studies (Angermeyer & Matschinger, 2000; Angermeyer & Matschinger, 2004). These

studies were mainly used to plan interventions aimed at reducing stigma in the country. The American studies reveal that the public have fear towards the mentally ill so that they do not keep social ties with them including friendship, marriage or sharing a room (Arboleda-Florez & Stuart, 2001). However, later studies show that there has been a positive change in the attitude towards the mentally ill and that these changes in the people's minds have contributed to the growing demand for mental health services in the United States (Mojtabai, 2007). Studies in the Asia Pacific Region mainly Fiji Islands, show that occupation, marital status, gender, age and dwelling are associated with positive disposition towards the mentally ill (Henry, 2004). But in Taiwan, direct contact and age were the two most important correlates of community attitudes (Song, Chang, Shih, Lin & Yang, 2005).

Studies in Africa demonstrated that negative attitudes towards mental illness still exist in the community (Hugo, 2003; Gureje, Lasebikan, Ephraim, Olley & Kola, 2005). The cross cultural studies examine the differences in attitudes among people in different countries and have brought out interesting results. One study revealed that the British public was significantly more tolerant than the Russian public (Shulman & Adams, 2002), another study showed that the respondents in Germany and Russia had similar beliefs with regard to the biological influences of mental illness. The Russians as compared to the Germans strongly believed that mental disorders were self inflicted (Angermeyer, Kenzine, Korolenko, Beck & Matschinger, 2004). A study conducted in Japan and Australia demonstrated that while the Japanese believe that weakness of character is the main cause of mental illness, the Australians believe that infection, allergy and genetics play a main role in mental illness (Nakane, Jorm, Yoshika, Christensen, Nakane & Griffiths, 2005). The issue of whether public attitudes have changed over time has been addressed in replication studies done by Angermeyer and team in Germany and these studies conclude that attitudes can change over time. The role of public education in overcoming negative attitudes has been debated. A few studies have highlighted that public education helps to eradicate stigma (Gaebel, Baumann, Witte & Zaeske, 2002; Green and Kreuter, 2004). All the above studies have mainly used case vignettes, structured

interview, standardized questionnaire, and have focused on group discussions as tools to elicit information.

The studies carried out in the 1960s and 1970s in India reveal that there existed a great deal of misconception, superstition and ignorance with respect to mental illness (Neki, 1966, Dube, 1970; Murthy, 1977; Padamadan, 1974; Satyavathi & Dwarki, 1972). Stigma of mental illness was especially related to people who were admitted in mental hospitals and these hospitals evoked strong images of fear. However, a study done in 2000 (Thara & Srinivasan) showed that only 12% named a supernatural cause for mental illness. The Orientation of the public towards mental illness has been studied through the years among the Indian population. One of the studies found that higher education and contact with mental illness had no influence on orientation towards mental illness and there was generally a lack of awareness of existing facilities for the mentally ill (Prabhu, 1983). A study by Raghuram (1992) revealed that people in contact with the mentally ill had more negative orientation towards them. Co-relation between gender and orientation revealed mixed results. Few studies showed that men were both favourably and unfavourably oriented towards mental illness (Bharathy, 1990; Ramesh, 1991). Some studies demonstrated that females were favourably oriented and the level of education did not have any impact on them (Basu, 1992). Older males over 40 also had more negative orientation.

A few Indian studies have examined the attitudes prevailing among the lay public on mental illness. The general trend of these studies indicated that the lay public is uninformed about the various aspects of mental health (Satyavathi & Dwarki, 1972). The study by Verghese and Baig (1974) revealed that there existed a positive attitude among the lay public towards mental illness and a higher income co-related with positive attitudes. However, a large scale study by (Padmavathi, Rajkumar & Srinivasan, 1998) revealed that about two thirds of people suffering from mental illness never received any treatment in spite of living within 10 kms of a psychiatric facility. Marriage, fear of rejection, avoidance by neighbours, the need to hide facts, discrimination in job, ridiculing etc have been highlighted in several studies in the Indian section (Murthy, 2001; Raghu, 2001; Thara & Srinivasan, 2000). The attitude

of the nurses, students and professionals has been studied in the Indian context. The student attitude was seen to be more positive towards the physically handicapped than the mentally handicapped (Padamadan, 1974).

A study by Murthy et al (2004) says that stigma and discrimination in India arises from the strong emphasis on heredity as the cause of illness, chronicity of illness, fear of violence and un-predictable behaviour and need for lifelong care. It needs to be noted that in India, if a person is diagnosed as mentally ill and if it is attributed to a genetic explanation, the individual will lose on the marriage prospects. Hence, the individual and the family prefer to keep the illness a secret. Attributing the reason for mental illness to supernatural powers would be more favourable in India. It is interesting to note that while in the developed world, attitudes have changed over time among the common man, in a developing country like Africa, negative attitudes still persist in the community. In the developed countries, shifting the causation from family and parenting theories to biological and brain disease related pathology has made the illness less stigmatizing as it removes the personal responsibility for the illness. However, in countries like Africa and India traditional beliefs such as mental illness is caused by evil spirits or is god's way of punishment may result in persisting negative attitudes. The review clearly demonstrates that socio-demographic characteristics play an important role in attitudes.

#### Materials and Methods

This paper is an exploration of the awareness and attitude of the public towards mental illness and disability. The study was carried out in Bangalore, Karnataka. The sample consisted of 400 people in the community. Participation in the study was voluntary following informed consent. The respondents were both male and female, age of the respondents were between 18 – 75 years and could speak English or Kannada. For data collection, the investigator contacted resource persons in the community who introduced the investigator to a number of individuals who were willing to be respondents in the study. Further, potential respondents were identified using snowballing technique. The study excluded

respondents with past or current history of mental illness, any chronic physical illness, mental retardation, any current or past exposure to psychological intervention or presence of substance abuse. Tools such as Orientation Towards Mental Illness (OMI, Prabhu, 1983) and Bogardus - Exposure, Knowledge and Social Distance Scale, Modified Version (Stuart & Arboleda-Florez, 2001), Attitude towards Mental Illness Scale (Developed by the researcher) were used. The data comprised of variables that were both categorical and continuous in nature. The individual variables were coded for computer analysis and analyzed using the statistical package for social sciences (SPSS, Version 10). Descriptive statistics like frequencies, percentages, mean and standard deviation were used. Chi-square test and student's t-test was used for intra group comparisons. Analysis of variance (ANOVA) with Bonferroni correction in the post hoc analysis was used for multiple group comparison. Analysis of covariance (ANCOVA) was used where ever it was necessary. Correlation coefficients were used to examine the relationship between socio-demographic variables and variables of interest in the study. Two tailed test of significance were set between 0.05 and 0.001 levels.

#### **Results and Discussion**

An examination of the demographic details of the common man reveals that slightly more than half of the total sample (N = 211, 53%) were comprised of men. The mean age of the respondents ranged from 18 – 75 years. Average age of men was 34 years and women were 32 years. The level of education (in years) of the respondents under study ranged from 'no education' to twenty years of education with majority having studied for 14 years, that is till graduate level. In the category of income, 41% earned below Rs. 5,000/- per month, 35% between Rs. 5,000 – 10,000/- and 24% above Rs. 10,000/- per month. More than half the respondents were married and majority of them (81%) belonged to nuclear families. Majority of them were Hindus (79%) in their religious affiliation and the remaining belonged to the Christian and Muslim faith.

On examination of the score of the total group of respondents it is seen that the group as a whole obtained scores below the mid-point indicating that they were not unfavourable in their orientation. There were no significant differences between gender, age and orientation. Education had an impact on the respondents orientation to mental illness with the more educated having lower scores on OMI indicating a more favourable orientation.

Income had a significant effect on the orientation of the common man to mental illness. Scores across three levels of income show that the respondents who earned less than Rs 5000/-per month were most unfavourably orientated on all the four domains of OMI, than the other two higher levels of income. Those having the highest income (> Rs 10,000/-) had the most favourable orientation to mental illness. This is probably due to the fact that most of the people, who earned below Rs 5,000 /- were uneducated.

Hindus exhibited more unfavourable orientation than respondents from other religions. Respondents who were Hindus in their religious affiliation had higher scores in all the four domains of the OMI as well as the total score. Hindus believed that the cause of mental illness could be divine displeasure or the influence of the moon and that mental illness comes as a punishment for one's sins. Treatment involved taking the mentally ill to holy places, fasting or performing religious ceremonies. The traditional belief system prevailing in India could also have contributed to these results.

About half the sample reported that they had read or heard news pertaining to mental illness and had seen or heard advertisements or promotions on mental illness and mental retardation (public messages for mental retardation was more than mental illness). Most of the respondents stated that they did not have much information about mental disability and the information they obtained was from television, internet or movies. Only 16% of respondents reported that they had worked as an employee in an agency that has provided services to people with emotional or mental problems and 28% of the respondents knew someone (mostly a neighbour) who had been treated for emotional problems. However, it needs to be noted that the intensity of familiarity varies from a person who has seen the mentally ill only on TV, to a person who has a mentally ill person as a friend or co-worker.

Of the respondents 85% agreed that the persons with mental illness could be treated in the community. This is a cue to understand that people in the community may be more accepting of the concept of community based rehabilitation. Majority (86%) of the respondents in this study agreed that the mentally ill needed prescription drugs to control their symptoms. 79% of the public still subscribe to the conventional stereotype that people with mental illness suffer from split or multiple personalities. This led to the fact that the people need to be informed about the psycho-biological aspects of mental illness.

Two thirds (66%) of the respondents thought that the mentally ill can hold a regular job. Understanding the perspective of the people on jobs for the mentally ill is very important as they themselves at some point of time could be potential employers too. 37% of the sample people felt that the mentally ill can be violent or aggressive and the people felt that the media plays an important role in influencing the public perception of mental illness. A study by Lawson & Fouts (2004) performed content analyses on 34 of the 40 full-length animated feature films that were produced by the Walt Disney Company between 1937 and 2001. The vast majority of films (85%) contained references to characters with mental illness, with an average number of references per film being five. The three most common single word references to mental illness was "crazy," "mad" or "madness," and "nut" or "nutty." By this criterion, 21% of all principal characters were judged to have a mental illness on at least one occasion.

As in the west, if not more, in India, films usually portray mental disorders in the form of crude comedy, showing the victim of mental illness as a subject of ridicule. Bhugra (2005) studied the portrayal of mental illness (especially psychosis) in Hindi films since 1950 and examined the influence of the prevalent social, political and economic factors on each portrayal. He emphasizes that Hindi films since the 1950s appear to have been influenced by changing cultural norms which in turn affected the way mental illness is portrayed. This practice aggravates the stigma associated with mental disorders. Film media should be used to dispel the stigma associated with psychiatric disorders.

About two thirds (63%) of the respondents agreed that people suffering from mental illness are a public nuisance due to poor hygiene and odd behaviour. The Majority (83%) agreed with the statement that the mentally ill could be seen shouting or talking to themselves in city streets. More than two-third's of the respondents (69%) asserted that they would not be ashamed if someone is diagnosed with mental illness in the family. The majority (77%) of the respondents stated that they could maintain a friendship, but 65% of the people said that they will not be comfortable in sharing a room with a mentally ill person. The findings indicate ambivalent feelings where the respondents are ready to interact with the mentally ill, but not ready to share intimate space with them.

The Majority (72%) of the people said that they would not like a marriage alliance with the mentally ill. In India, mental illness affects the prospects of marriage adversely given the system of arranged marriages in which the family members do a thorough background check and are likely to screen out any person with a family history of mental illness. A few studies from other non-western cultures have reported similar findings (Gureje et al., 2005).

Older people showed greater social distance to the mentally ill in this study. More than two thirds (70%) of the people felt that people were afraid of persons with mental illness even if he or she has been treated successfully. The majority (84%) felt that people are prejudiced towards persons with mental illness. However, it is heartening to note that only one third (33%) stated that persons with mental illness have no future.

Of the respondents 84% stated that physical disability is more acceptable than mental disability in the community and 65% stated that mental illness should not be treated in the same hospital as physical illness. Of the respondents 91% agreed that the best way to help the mentally ill is to let them stay in their community. This is a very positive finding. However, 38% of the respondents said that they would move out of the community if a mental health facility is set up in their neighbourhood.

Empowerment of the mentally ill has become a major area of intervention which focuses on enhancing the patient's rights mainly in the area of civil rights. Regarding the legal rights of the mentally ill, the majority (77%) agreed that the rights of the mentally ill should be protected. This result was very encouraging and it shows that this lead on attitudes of the people at large could be used for future interventions in the community. Besides, this result also can indicate that the society is aware of the discrimination and negligence faced by the mentally ill in the community.

Of the respondents 80% in this study agreed with the statement that the corporations and government should provide jobs for the mentally ill. About half (54%) of the respondents felt that the mentally ill should not have children and should be given a divorce if the spouse is mentally ill. Of the respondents 37% agreed that the mentally ill should have voting rights. About half (53%) of the respondents agreed that they should have rights to property. Many of the respondents voiced to the researcher that the mentally ill may not be able to take up the huge responsibility of taking care of the property.

About half of the respondents (45%) were not aware of the concessions provided by the government for the disabled in India. Around 65% did not know about the existence of the Mental Health Act (1987) or the Person's with Disabilities Act (1995). These findings reveal that the government and the NGO's should come forward to educate the public on all the legal policies and protection provided by the law for persons with mental illness. A surprised finding was that around 74% of the sample population were not aware about the existence of rehabilitation facilities in their neighbourhood and services provided by the rehabilitation facilities (for the mentally ill) in the community in general.

Education had a significant effect on attitude of the people towards mental illness. People who were more educated demonstrated positive attitudes towards mental illness in general, the rights of the mentally ill and greater awareness of legal provisions and rehabilitation services.

The study concluded that the people have a neutral orientation towards mental illness, moderate exposure to the mentally ill and knowledge about mental illness. Although they are fairly low on social distance, this does not apply to intimate relationships such as sharing a room or marriage. The public felt that the rights of the mentally ill should be protected, but they had low awareness regarding legal provisions and rehabilitation services for the mentally ill. Although the society was accepting of people with e mental illness to a certain extent, it was evident that there existed false beliefs and negative attitudes towards mental illness in the community. Education has come out to be a strong component linked to attitudes. Hence, it can conclude that providing education to the people may help improve attitudes towards the mentally ill. Public health messages about the mentally ill in the past have often inadvertently reinforced negative stereotypes about the mentally ill. Hence, messages need to be positively framed depicting the recovered mentally ill as active and responsible citizens of society. The media also needs to be educated on how to present people with disabilities in a positive manner. Information should also be disseminated to the people on the concessions, legal rights and rehabilitation services for the mentally ill.

# Implications of the Study

The study highlights that the younger and educated population are more neutral in their orientation and exhibited positive attitudes and may be more receptive to messages that focus on attitudinal change. Exposing children and young adults especially in their high school and college years to people who have recovered from mental illness and combining it with positive mental health messages may be a more effective strategy. The study also highlights that it is important for the public to be informed about the rehabilitation services in the community which will improve help seeking behaviour. It is just a question of reaching out to the public.

#### **Tables**

Table 1: Socio-Demographic Characteristics of the Sample

Variable		Total	Male	Female	t/ χ <sup>2</sup>
		(N = 400)	(N = 211)	(N = 189)	
Age	Mean	33.02	34.34	31.55	2.24*
(18-75)	SD	12.51	13.04	11.75	
Education	Mean	13.58	13.80	13.33	0.92
(0-20)	SD	5.07	4.86	5.30	
Income	< 5000	163 (41%)	66 (17%)	97(24%)	25.50***
( per	Between	141 (35%)	75 (19%)	66 (17%)	
month)	5000 -				
	10000				
	> 10000	96(24%)	70 (18%)	26 (7%)	
Marital	Married	203 (51%)	105 (26%)	98 (25%)	0.17
Status	Unmarried	197 (49%)	106 (27%)	91 23%)	
Family	Nuclear	324 (81%)	176(44%)	148(37%)	1.69
Type	Joint	76(19%)	35(9%)	41(10%)	
	Hindus	311(79%)	160(40%)	151(38%)	0.95
Religion	Others	89(22%)	51(13%)	38(10%)	

<sup>\*</sup>P<0.05; \*\*\* P <.001

Table 2: Mean and SD of the Whole Group on Orientation to Mental illness (OMI Scale)

OMI Domains	Expected Range	Obtained Range	Mid Point	Mean (SD) Total Group (N = 400)
Area of Causation	29 - 145	32 - 120	87	82.21(17.00)
Perception of Abnormality	14 - 70	15 - 63	42	40.20 (8.89)
Treatment	10 - 50	11 - 45	30	30.54 (6.21)
After Effects	14 - 70	14 - 68	42	39.33 (9.11)
OMI Total	67 - 335	74 - 279	201	192.28 (35.72)

Table 3: Correlation of Age and Education with Orientation to Mental Illness (OMI Scale)

OMI Domains	Age	Education
Area of Causation	-0.09	-0.13*
Perception of Abnormality	0.05	-0.27**
Treatment	-0.07	-0.01
After Effects	0.01	-0.31**
OMI Total	-0.04	-0.21**

<sup>\*</sup>P < .05 \*\* P < .01

Table 4: Mean and SD Scores of different Income levels on Orientation to Mental Illness (OMI Scale) and Group Comparison Using ANOVA

OMI Domains	Income Rs <5000 (N = 163)	Income Rs > 5000 - 10000 (N = 141)	Income Rs > 10000 (N = 96)	F	Sign. Difference between Groups
Area of Mean Causation SD	85.37 17.12	82.20 16.71	76.86 16.03	7.83***	1/3,2/3
Perception of Mean Abnormality SD	42.20 9.38	38.69 8.59	39.02 7.82	7.24***	1/2,1/3
Treatment Mean SD	31.27 6.59	30.91 5.46	28.76 6.30	5.44**	1/3,2/3
After Effects Mean	41.87 9.82	37.90 8.71	37.11 7.31	11.44***	1/2,1/3
OMI Total Mean SD	200.71 37.37	189.70 33.12	181.76 33.41	9.46***	1/2,1/3

<sup>\*\*</sup> P<.01, \*\*\* P<.001

Table 5: Co-relation of age and education with exposure, knowledge and social distance Score

BOG Domains	Age	Education
Exposure	-0.04	0.03
Knowledge	-0.04	0.07
Distance	0.12*	- 0.14**

<sup>\*</sup> P < .05, \*\* P < .01

**Attitude towards Mental Illness Education** Age (Domains) General Attitude Towards 0.06 -0.12\*Mental Illness **Attitudes Towards Rights** 0.08 -0.27\*\* of the Mentally Ill Awareness on Legal Provisions and 0.09 -0.27\*\* Rehabilitation Services

Table 6: Correlation of Age and Education with Attitudes towards Mental Illness

## References

- Angermeyer, M., Kenzine, D., Korolenko, T., Beck, M. & Matschinger, H. (2004). Performances of the inhabitants of the city of Novosibirsk on Mental Disorders: A representative study. *Psychiatric Praxis*, 31, 90 95.
- Angermeyer, M. S. & Matshcinger, H. (2000). Have there been any changes to public attitudes towards psychiatric treatment? *British Journal of Psychiatry*, 177, 396 401.
- Angermeyer, M. S. & Matshcinger, H. (2005). Labeling-stereotype-discrimination. An investigation of the stigma process. *Social Psychiatry & Psychiatric Epidemiology*, 40, 391-395.
- Arboleda-Florez, J. & Stuart, H. (2001). Community attitudes toward people with Schizophrenia. *Canadian Journal of Psychiatry*, 46, 245–252.
- Bachrach, L. (2000). The past and future of mental health services. *Psychiatric Services*, *51*, 1511-1512.
- Basu, S. (1992). A Study of the orientation towards mental illness among school teachers. In A Shah & K Rao (Eds.) *Psychological Research in Mental Health and Neuroscience*: 1957-2007 (pp.331). National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore.
- Bharathy, B. K. (1990). Orientation towards mental illness among mental hospital employees. In A. Shah & K. Rao (Eds.) *Psychological Research in Mental Health and Neuroscience*: 1957 2007 (pp. 328-329). National

<sup>\*</sup> P<.05, \*\*P<.01

- Institute of Mental Health and Neurosciences (NIMHANS), Bangalore.
- Bhugra D. (2005). Mad tales from Bollywood: the impact of social, political, and economic climate on the portrayal of mental illness in Hindi films. *Acta Psychiatr Scandanavica*, 4, 250 256.
- Chan, F., Heidi, J., Parker, H., Lam, C., Chan, T. & Yu, B. (1988). Differential attitudes of Chinese students toward people with disabilities: A cross cultural perspective. *International Journal of Social Psychiatry*, *4*, 267–273.
- Dube, K. C. (1970). A study of prevalence and biosocial variables in mental illness in the rural and urban community in Uttar Pradesh, India. *Acta Psychiatrica Scandinavica*, 46, 327.
- Gaebel, W., Baumann, A., Witte, A. & Zaske, H. (2002). Public attitudes towards people with mental illness in six German Cities: Results of a public opinion survey with special consideration of Schizophrenia. *European Archives of Psychiatry & Clinical Neuroscience*, 252, 278.
- Green, L. W. & Kreuter, M. W. (2004). Health program planning: An educational and ecological approach. 4. New York: McGraw Hill.
- Griffiths, K., Nakane, Y., Christensen, H., Yoshika, K., Jorm, A. & Nakane, H. (2005). Stigma in response to mental disorders: A comparison of Australia and Japan. *British Medical Journal of Psychiatry*, 6, 21.
- Gureje, O., Lasebikan, V., Ephraim, O., Olley, B. & Kola, L. (2005). Community attitudes of knowledge of and attitude to mental illness in Nigeria. *British Journal of Psychiatry*, 186, 436 441.
- Henry, S. (2004). Attitude toward and knowledge about mental illness in Fiji Islands. *International Journal of Social Psychiatry*, 50, 361-375.
- Hugo, C. J. (2003). Community attitudes toward and knowledge of mental illness in South Africa. *Social Psychiatry and Psychiatric Epidemiology*, 38, 715 719.
- Kirk, S. A. & Therrien, M. E. (1975). Community mental health myths and fate of former hospitalized patients. *Psychiatry*, *38*, 209–217.
- Lawson A. & Fouts G. (2004). Mental illness in Disney animated films. *Canadian Journal of Psychiatry*, 49, 310–314.
- MHA (1987), Mental Health Act 1987. Ministry of Law, Justice and Company Affairs.
- Mojtabai, R. (2007). American's attitudes toward mental health treatment seeking: 1990-2003. *Psychiatric Services*, *58*, 642 51.

- Mueller, B., Nordt, C., Lauber, C., Meyer, P.C. & Roessler, W. (2006). Social support modifies perceived stigmatization in the first years of mental illness: A longitudinal approach. *Social Science and Medicine*, 62, 39–49.
- Murthy, R. S. (1977). Rural community attitudes to mental disorders: Preliminary findings. *Indian Journal of Clinical Psychology*, 4, 141–144.
- Murthy, R.S. (2001). Community mental health in India. In R. S. Murthy (Ed.), *Mental Health in India:* 1950-2000, (pp. 150-176). Bangalore: People's Action for Mental Health.
- Murthy, R. S., Shankar, R., Sharma, A., Shetty, H., Srivatsava, A., Thara, R. & Wig, N. N. (2004). Stigma experiences of patients of Schizophrenic illness and the family members from India. (Unpublished Data).
- Nakane, Y., Jorm, A. F., Yoshioka, K., Christensen, H., Nakane, H. & Griffiths, K. M. (2005). Public beliefs about causes and risk factors for mental disorders: A comparison of Japan and Australia. *Psychiatry*, 21, 5–33.
- Neki, J. S. (1966). Problems of motivation affecting the psychiatrist, the general practitioner and the public in their interactions in the field of Mental Health. *Indian Journal of Psychiatry*, *8*, 117–124.
- Ozmen, E., Ogel, K., Aker, T., Sagduyu, A., Tamar, D. & Boratav, C. (2005). Public opinions and beliefs about the treatment of depression in Urban Turkey. *Social Psychiatry & Psychiatric Epidemiology*, 40, 869–876.
- Padamadan, J. (1974). Institutionalized mental patients and their membership in society: A study in environment. In A. Shah & K. Rao (Eds) *Psychological Research in Mental Health and Neuroscience:* 1957 2007 (pp.319). National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore.
- Padmavathi, R., Rajkumar, S. & Srinivasan, T. N. (1998). Schizophrenic patients who were never treated—A study in an Indian urban community. *Psychological Medicine*, 28, 1113 1117.
- Prabhu, G. G. (1983) Mental illness: Public attitudes and public education. Prof. M.V. Gopala Swamy Memorial Oration. *Indian Journal of Clinical Psychology*, 10, 13-26.
- PWD Act (1995). The persons with disabilities (Equal opportunities, protection of rights and full participation) Act 1995, Ministry of Law, Justice & Company Affairs, Government of India

- Raghu, T. M. (2001). Cultural aspects of Schizophrenia: An exploratory study. Thesis submitted to The National Institute of Mental Health and Neurosciences, Bangalore.
- Raghuram, A. (1992). Attitudes towards mental illness: A comparative study. Pg 350-351. In A. Shah & K. Rao (ed) Psychological research in mental health and neuroscience 1957 2007, National Institute of Mental Health and Neurosciences, (NIMHANS), Bangalore.
- Ramesh, S. (1991). Orientation towards mental illness of the under graduate medical students: A comparative study. Pg 330-331. In A. Shah & K. Rao (ed) *Psychological research in mental health and neuroscience*: 1957–2007, National Institute of Mental Health and Neurosciences, (NIMHANS), Bangalore.
- Rosenfield, S. (1997). Labelling in mental illness: The effects of received services and perceived stigma on life satisfaction. *American Psychological Review*, 4, 660 772.
- Satyavathi, K. & Dwarki, B. R. (1972). Views of an educated group on mental health problems. Paper presented at the All India Conference of Clinical Psychologists, Hyderabad.
- Shulman, N. & Adams, B. (2002). A comparison of Russian and British attitudes towards mental health problems in the community. *International Journal of Social Psychiatry*, 48, 266-278.
- Song, L.Y., Chang, L.Y., Shih, C.Y., Lin, C.Y. & Yang, M. J. (2005). Community attitudes towards the mentally ill: the results of a national survey of the Taiwanese population. *International Journal of Social Psychiatry*, 51, 162-76.
- Thara, R. and Srinivasan, T. N. (2000). How stigmatizing is schizophrenia in India. *International Journal of Social Psychiatry*, 46, 135–141.
- Van't Veer, J. T., Kraan, H. F., Drosseart, S. H. & Modde, J. M. (2006). Determinants that shape public attitudes towards the mentally ill: A Dutch public study. *Social Psychiatry and Psychiatric Epidemiology*, 41, 310 317.
- Verghese, A. & Baig, A. (1974). Public attitudes towards mental illness The Vellore Study. *Indian Journal of Psychiatry*, 16, 8-18.
- Wolff, G., Pathare, S., Craig, T., and Leff, J., (1996). Public education for community care-a new approach. *British Journal of Psychiatry*, Feb 168(2), 191-198