Original Article

Attitudes of General Hospital Staff Toward Patients Who Self-harm in South India: A Cross-Sectional Study

Narendra Kumar, Rajagopal Rajendra, Sumanth Mallikarjuna Majgi¹, Murali Krishna², Paul Keenan³, Steve Jones³

ABSTRACT

Background: There is growing global interest into the attitudes and clinical management of persons who deliberately self-harm. People who self-harm experience many problems and typically have many needs related to management of their psychological wellbeing. A positive attitude amongst general hospital staff should prevail with people who self-harm. The principal purpose was to determine student staff attitudes towards patients who self-harmed from a professional and cultural perspective, which might influence patient treatment following hospital admission. The focus concentrated upon staff knowledge, attitudes and beliefs regarding self-harm. **Methods:** A cross sectional survey of the hospital staff using a validated questionnaire was carried out. This paper reports on interdisciplinary staff from two large general hospitals in Mysuru, South India (n=773). **Results:** Findings suggest that within a general hospital setting there is wide variation in staff attitudes and knowledge levels related to self-harm. Whilst there is attitudinal evidence for staff attitudes, this study investigates interprofessional differences in an attempt to progress treatment approaches to a vulnerable societal group. Very few staff had any training in assessment of self harm survivors. **Conclusion:** There is an urgent need for training general hospital staff in self harm assessment and prevention in south India. The results allow a series of recommendations for educational and skills initiatives before progressing to patient assessment and treatment projects and opens potential for cross cultural comparison studies. In addition, interventions must focus on current resources and contexts to move the evidence base and approaches to patient care forward.

Key words: Deliberate self-harm, mental health, staff attitudes

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Departments of Psychiatry and ¹Preventive and Social Medicine, Mysore Medical College and Research Institute, ²Department of Psychiatry, Wellcome DBT Trust Research Fellow, Epidemiology Research Unit, CSI Holdsworth Memorial Hospital, Mysuru, Karnataka, India, ³Postgraduate Studies Centre, Faculty of Health and Social Care, Edge Hill University, Aintree Campus, Liverpool, UK

Address for correspondence: Dr. Narendra Kumar

Department of Psychiatry, Mysore Medical College and Research Institute, Sayyaji Rao Road, Mysuru - 570 001, Karnataka, India. E-mail: drheggere@gmail.com

INTRODUCTION

This paper examines for the 1st time, a large group of interdisciplinary hospital staff attitudes and knowledge toward self-harm in clinical practice from Mysuru, Southern India. The National Institute for Clinical Excellence^[1] define self-harm as "self-poisoning or self-injury irrespective of the apparent purpose of the act." Suicide and self-harm are significant global public health problems.^[2,3] A single factor out of many which influence largely the patient care and the risk of suicidal behavior is the attitudes of staff toward patients and their working knowledge about self-harm.^[4] Health care professionals, especially nurses, play a central role in the care of people who self-harm.^[5] Clinicians need to respond to deliberate self-harm (DSH) appropriately, as the relationship between DSH and suicide is well established.^[6,7]

There is a growing body of literature examining the attitudes of health care staff toward self-harm patients.^[8] A recent literature review undertaken on nurse's attitudes to self-harm found 15 articles of significance that uncovered negative attitudes that impact on the quality of care.^[5] Lack of clarity, uncertainty, and knowledge about managing self-harm patients compound the issue for all involved.^[9-13]

The attitudes of staff in medical settings were found to be predominantly negative.^[14] Staff also feel inadequately trained to care for self-harm patients and recognize the need for development in this area.^[9,11-13,15] The incidence of self-harming in the general population appears to be increasing.^[16-18] DSH has been recognized as a major public health problem in India for some time, with significant obstructions, including difficulties in establishing local models to understand these behaviors and associated unfavorable attitudes of health care professionals toward those who self-harm.^[2,18,19]

Staff attitudes toward self-harm patients are related to a number of factors, and more experienced staff tend to have more positive attitudes than younger staff.^[8,15,20,21] Some studies have reported gender differences with female professionals having more positive attitudes than male counterparts.^[8,12,15] In a significant literature review in 2010, the factors affecting staff attitudes toward self-harm patients were a lack of education and training.^[22] There is a developing evidence base in support of positive attitudes among health professionals that enhance the effectiveness of care and treatment toward patients who have self-harmed.^[23-25]

DSH is associated with successful suicides with 84% of it occurring in low- and middle-income countries, out of which India and China account for 49% of global suicides.^[26] The World Health Organisation

estimates that 170,000 of 900,000 global suicides are from India.^[3] The most common form of DSH is self-poisoning.^[27] The rate of admissions to hospitals in India following suicide attempts has become a major public health concern.^[28,29] Suicides in India differ from those in Western countries in a number of ways such as the high use of pesticides, large numbers of married women, yet family relationship problems, and life events are important causative factors.^[4,28,30]

Suicide and attempted suicide imposes a huge social, emotional, and economic burden on the family and society.^[6,31] Developing health resources and educational initiatives with the health staff seems a sensible step. In one study undertaken on nursing students in northern India, a suicide opinion questionnaire identified the need for enhancing educational exposure of nursing students at the earliest opportunity.^[32]

MATERIALS AND METHODS

The study was done simultaneously in two hospitals in Mysuru during a 2 months period in 2015. KR Hospital, a Tertiary Care Government Medical College Hospital. CSI Holdsworth Memorial hospital, a Christian missionary-run hospital was the second hospital. Approval of ethics committee from both the participating hospitals was taken.

The questionnaires were distributed to the hospital staff across the consultants, postgraduates (PG's)/casualty medical officers (CMO's), interns, staff nurses and medical and nursing students (n = 773).

Since the study was explorative, sample size was not calculated, and surveys were completed by 60 consultants, 84 staff nurse, 113 PG's/CMO's, 100 interns, 192 MBBS students, and 224 nursing students.

The validated questionnaire consisted of 30 statements regarding DSH measuring the attitudes regarding self-harm. The initial 23 questions were taken from a prior study.^[33] The last 7 questions were added after validation (face validity and construct validity) by the research team involving three psychiatrists to cover the needs of the community in which the study was conducted. The questionnaire consisted of responses of whether they agreed or not on a five-point Likert scale as follows: (1) Strongly disagree, (2) disagree, (3) neither agree nor disagree, (4) agree, and (5) strongly agree. The scores ranged from 30 to 150. Few descriptors were reversed for negatively worded items. Brief demographic data were collected emphasizing upon the education level, years of clinical experience, experience with any self-harm, or suicide with family or friends and the training if any received toward handling the patients

	Consultants, n (%)	Staff nurses, n (%)	PG's and CMO's, n (%)	Interns, n (%)	MBBS students, n (%)	Nursing students, n (%)
Sex						
Male	42 (70.0)	9 (10.7)	61 (54.0)	51 (51.0)	101 (52.6)	13 (5.8)
Female	18 (30.0)	75 (89.3)	52 (46.0)	49 (49.0)	91 (47.4)	211 (94.2)
Religion						
Hindu	55 (91.7)	73 (86.9)	97 (86.6)	96 (97.0)	168 (87.5)	123 (55.2)
Muslim	4 (6.7)	2 (2.4)	9 (8.0)	3 (3.0)	14 (7.3)	5 (2.2)
Christian	1 (1.7)	9 (10.7)	6 (5.4)	0 (0)	6 (3.1)	89 (39.9)
Others	0 (0)	0 (0)	0 (0)	0 (0)	4 (2.1)	6 (2.7)
Marital status						
Single	7 (11.7)	14 (16.7)	66 (58.4)	96 (96.0)	191 (99.5)	217 (96.9)
Married	53 (88.3)	69 (82.1)	46 (40.7)	3 (3.0)	1 (0.5)	7 (3.1)
Remarried	0 (0)	0 (0)	1 (0.9)	0 (0)	0 (0)	0 (0)
Widowed	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Divorced	0 (0)	1 (1.2)	0 (0)	1 (1.0)	0 (0)	0 (0)
Separated	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Highest education						
Doctorate	3 (5.0)	0 (0)	1 (0.9)	0 (0)	0 (0)	0 (0)
Postgraduate	54 (90.0)	0 (0)	25 (22.5)	0 (0)	0 (0)	4 (3.9)
Graduate	3 (5.0)	0 (0)	84 (75.7)	97 (100.0)	0 (0)	20 (19.6)
Diploma	0 (0)	14 (100.0)	1 (0.9)	0 (0)	0 (0)	78 (76.4)

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PG's - Postgraduates; CMO's - Casualty medical officers

who self-harm. The higher the score, the more positive the attitudes held toward patients who self-harmed.

RESULTS

In the study, the males outnumbered females in almost every group except the staff nurse and the nursing student groups. All the groups had majority from Hindu religion, except the nursing students group with 40% Christians. Majority was married among the consultant and staff nurse groups while the PG's/CMO's group had a mixed group of married and single status. Majority were single in the rest of the groups. The nursing staff had not filled in the education attainment details properly, but majority were from diploma among the nursing students. Among the consultants, PG's were more with graduates predominating among the PG's and CMO's group [Table 1].

With the exclusion of 52 participant's incomplete responses, the response rate was still high at 93.27%. The higher scores indicate better attitude toward self-harm survivors. The maximum scores were noted across the consultants (103.44) followed by the PG's/CMO's group (102.12). Interns (101.5) scored better than the medical students (99.97). Among nurses, the staff (99.7) marginally outscored their students (99.29). Overall, the scores across different groups did not vary much when the overall mean score was just over 100.58 [Table 2].

Among gender, the women scored better on the attitude in all the groups, except the interns group. However, the difference was not statistically significant in any of the groups.

Among the nursing staff, the senior staff constituted the largest group with 44 but had the lowest score of 99.49 compared to the other two groups with middle and the junior level staff. However, the scores across the groups were not significant (P = 0.8).

With education, the attitudes across various groups did not vary much, with consultants scoring (103.44) over other groups. While the nursing students group scored the least with 99.4 which was the only group with statistically significant value of P < 0.02.

DISCUSSION

Negative attitudes toward those who self-harm are reported as common among nurses.^[4,5] The influence of professional's age, gender, personal, and work related experience remains unclear till date. It is argued that a major change is needed regarding certain staff group attitudes toward DSH patients, and calls for education initiatives to be made widely available. Professional interventions are based upon a therapeutic relationship irrespective of the health concern. If these negative beliefs and limited knowledge are to be addressed, then time and resources to build a learning relationship with staff must develop so that this can be integrated into clinical practice for this vulnerable group.

The majority of studies regarding staff attitudes toward patients who self-harm have investigated specific

Table 2:	Attitude scores	across different	professional	groups
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	n	Mean	SD	Minimum score	Maximum score
Consultants	57	103.44	7.036	87	118
Staff nurse	84	99.7	6.536	82	116
PG's and CMO's	111	102.12	9.236	73	123
Interns	96	101.5	7.518	82	115
MBBS students	192	99.97	7.682	81	121
Nursing students	181	99.29	7.839	74	116
Total	721	100.58	7.875	73	123

 $\mathsf{PG}\mathsf{'s}-\mathsf{Postgraduates};\ \mathsf{CMO}\mathsf{'s}-\mathsf{Casualty}\ \mathsf{medical}\ \mathsf{officers};\ \mathsf{SD}-\mathsf{Standard}\ \mathsf{deviation}$

professional groups, i.e., nurses or doctors^[34] or the accident and emergency (A and E) team.^[12] After a review of the available literature, our study has the highest number of participants (n = 773) across doctors and nurses, only third after a study done by Ghodse in 1978 and Palmer and Strevens in 2006 with 1248 and 968 participants respectively.^[35,36] Both these studies were undertaken on A and E staff only, unlike the present study across the general hospital staff. Among the handful of studies available in general hospital staff, this study has the highest number of participants. The additional group in our study was the inclusion of interns which is present in only one earlier study from Australia.^[37]

On predicted lines, the attitude of the consultants was better with a mean score of 103.44/150 (68.96%) compared to the rest, though this score was not much significant when compared with an overall mean score of 100.58 (67.05%) across the groups and the least mean score of 99.29 (66.19%) among the nursing students. In comparison with the previous studies which have usually clustered attitudes into positive and negative, our study measured the attitudes on a linear scale with the attitude being better proportionally with the scores. The response rate of 93.27% was far better than in most studies till date. The consultant, the PG's/CMO's and the interns group scored better than the nursing groups outlining that the doctors, in general, had better attitudes than the nursing groups. This result is in contrast to the earlier findings of doctors in general hospitals having more negative attitudes compared to the nursing staff.^[12,37-40] Psychiatrists were found to be more positive in their attitude toward DSH patients than other specialists^[41,42] and the participation of 6 psychiatrists among the consultants group needs to be considered.

The PG's and the CMO's are the frontline staff dealing directly with the self-harm patients, and the emergency staff are known to be less sympathetic than other staff toward people who self-harm.^[43] In our study, the attitude score of the PG's/CMO's was almost as good as that of the consultants which may be due to

the availability of psychiatrists and their liaison. The interns, as well as the medical student's attitudes, were better than that of the nursing staff as well the nursing students, though marginally, probably for the exposure and the teaching.

The scores of attitudes of the nursing groups consisting of the staff nurses (99.7) and the nursing students (99.29) were less in comparison with the other groups which should alert the mental health professionals as the attitudes of the nurses, in particular, is important in delivering good and effective treatment service.^[44] These findings were no different from the earlier findings of negative attitudes in nurses toward self-harm patients.^[21,39] This can be attributable to the lack of training and due to the lack of mandatory update of knowledge to the nursing staff. A notable study in the UK showed positive attitudes in community mental health and in an A and E department nurses.^[34] The same study had shown no significant variation in attitudes in relation to age, but negative attitudes in senior nurses working in community. This was replicated in our study with scores on attitudes having dipped with the seniority. The maximum scores of 100.57 are seen with the junior nursing staff compared with the least scores of 99.90 among the senior nursing staff. The same has been seen in general hospital settings with negative attitudes correlating with greater experience.^[13,35] On the contrary, there have been studies showing improvements in attitude with experience, especially in psychiatric settings.^[15,45,46] However, not many studies have investigated the attitudes among the nursing students which our study aimed to achieve with mean scores, less at 99.29 (66.19%) which is better than the finding in other Indian studies where only half of the students had positive attitude.^[4,32]

The mean scores on attitudes have been largely better with females across all the groups except the interns where the males (102 vs. 100) marginally outscored the females, and the medical students have even scores of 100 across them, which goes with the earlier findings where female staff had more positive attitudes than male staff.^[15,35,47] The gender role association (male doctors and female nurses) is of consideration in this study.

Thus far, from the review of the available literature, there are no studies that have examined staff educational attainment levels, or its effect upon the attitudes toward patients who self-harm. This study investigated that aspect but found no significance in any groups except with the nursing students which was hard to explain. However, this may have been due to the gross disparity in the number of participants distributed across various educational groups. Another interesting aspect of this study was in the examination of the influence of a family history of suicide or friends upon the attitudes where the attitude toward suicide was better across all the groups who had a history of suicide in family or friends except across the staff nurse group which scored only 97.43 in comparison with the overall score of 99.91. The scores were statistically significant (P < 0.002). Between participant differences was statistically significant only in the interns groups and the most worrying was again the lowest mean attitude scores in the nursing staff group which was lower than the mean scores of nurses with no history of suicide in family or friends. One more startling fact was that there were very less number of participants who have had any formal training in handling people who self-harm, and only among the nursing students did the training had any impact showing in the statistically significant difference (P < 0.01) noticed between the trained and the nontrained ones.

There was statistically significant correlation of age in years with years of clinical experience (r = 0.71, P < 0.0001) and years since qualified (r = 0.72, P < 0.0001), with regard to the training and its effect upon the attitudes scores toward suicide, there were hardly 14 people who had received training with regard to the suicide across all the groups except the nursing students where there were 40 students who had received training and had significantly better attitudes toward self-harm P < 0.001.

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Conflicts of interest

There are no conflicts of interest.

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