Attitudes of Indian hospital staff, medical and nursing students towards patients who self-harm

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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 staffshould prevail with people who self-harm.**Aims** The principal purpose was to determine qualified and student staff staff attitudes towards patients that 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 regrading self-harm. **Methods** A validated questionnaire was carried out. This paper reports on interdisciplinarystaff from two large general hospitals in Mysore, Southern 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.
Conclusion 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.

Introduction

The research examined multi-disciplinary staff attitudes towards patients who have carried out acts of deliberate self-harm. All the staff participants interviewed for the study work at two large inner city general hospitals in Mysore, Southern India. The term Para suicide or Deliberate Self-Harm (DSH) was first used in 1969 to describe situations in which the person simulates or contemplates suicide, in that he is the immediate agent of an act which is potentially physically harmful (Kreitman, 1969). The National Institute for Clinical Excellence (NICE; 2004) defineself-harm as "self-poisoning or self-injury irrespective of the apparent purpose of the act". A factor which influences patient care and can increase the risk of suicidal behaviour is the attitudes of staff towards patients and their working knowledge about self-harm (Jones et al, 2014). Staff attitudes can be influenced by a number of factors.

Background Literature

Suicide and self-harm are significant global public health problems (Krug et al, 2002; WHO 2009). Though DSH is frequently encountered in emergency department(ED), it is a hidden health problem worldwide. Self-harm is a growing health problem. Health care professionals, especially nurses, should play a central role in the care of people who self-harm (Karman et al, 2015). Positive professional attitudes towards those who self-harm are essential for staff to deliver quality interventions. This paper examines for the first time a large group of interdisciplinary hospital staff attitudes and knowledge towards self-harm in clinical practice from Southern India.

It is estimated that the number of non-fatal self-harm episodes are 10 to 100 times greater than the number of deaths (Silverman, 2009: Pirkis, 2009). Clinicians need to respond to DSH appropriately, as the relationship between DSH and suicide is well established (Hawton et al, 2001; Colman et al,

2004). Suicide risk after DSH is 50 times greater than in the general population (Dower, 2000). Hospital admissions for DSH are 17 times more likely to be encountered than death due to suicide (Calof, 1994).

There is a growing body of literature examining the attitudes of health care staff towards self-harm patients (Mackay, 2005; Suominen, 2007). Staff often report feeling frustration towards patients who are frequently admitted and have difficulty feeling empathy for those patients (Berlim et al, 2007). Lack of clarity and uncertainty about how to manage self-harm patients, and lack of knowledge compound the issue for all involved (Bailey, 1994; Anderson, 2003; Crawford, 2003; Mackay, 2005; Friedman et al, 2006; Berlim et al, 2007). A recent literature review undertaken on nurse's attitudes to self-harm found 15 articles of significance that uncovered negative attitudes that impacted on the quality of care (Karman et al, 2015).

The attitudes of staff in medical settings were found to be predominantly negative especially when the patients presented repeatedly or under the influence of alcohol (Saunders et al, 2012). Staff also report feel inadequately trained to care for self-harm patients and recognise the need for development in this area (Bailey, 1994; Samuelsson, 1997; Crawford, 2003; Mackay, 2005; Friedman, 2006; Berlim, 2007). The incidence and gravity of self-harming in the general population appears to be on the increase (McDonald, 2006; Cleaver, 2007; Bose et al, 2009).Deliberate self-harm and suicide attempters have been recognised as major public health problems in India for some time, but there are significant obstructions to effective clinical interventions, including difficulties in establishing local models to understand these behaviours and associated unfavourable attitudes of health care professionals towards those who self-harm (Aaron et al, 2004; Bose et al, 2006; Gunnell et al, 2007).

Staff attitudes towards self-harm patients are related to a number of demographic and employment factors and more experienced staff tend to have more positive attitudes than younger inexperienced staff (Samuelsson, 1997; McCann, 2006; McLaughlin, 1994; Suominen, 2007). Some studies have reported that female professionals have more positive attitudes than male highlighting gender differences (Samuelsson, 1997; Mackay, 2005; Suominen, 2007). In a significant literature review in 2010, the factors affecting staff attitudes towards self-harm patients were analysed and the following themes were reported(McHale and Felton, 2010). A lack of education and training were the primary rationale for negative attitudes followed by the professional's perception differences between their expected and actual roles. Negative attitudes were also linked to the professional's perceptions of the patient's control of self-harming behaviours. A paucity in the literature exists for more positive attitudes towards self-harm when staff were interested and knowledgeable on the

subject. There is a developing evidence base in support of positive attitudes among health professionalsthat enhances the effectiveness of care and treatment towards patients who have self-harmed (Rayner et al, 2005; McAllister et al, 2008; Hicks and Hinck, 2009).

DSH is associated with successful suicides with 84% of global suicides occurring in low and middle income countries, out of which India and China alone account for 49% of global suicides (Philipsand Cheng, 2012). The WHO estimates that of nearly 900,000 people who die from suicide globally every year, 170,000 are from India (WHO, 2004). Within India deliberate self-harm is conceptually more commonly known as attempted suicide. The most common form of deliberate self harm is self-poisoning (Hawton et al, 2003). The rate of admissions to hospitals in India following suicide attempts has become a major public health concern (Khan, 2002; Gururaj et al, 2004). Suicides in India differ from those in western countries in a number of ways like the high use of pesticides, large numbers of married women, yet fewer elderly subjects, and family relationship problems and life events are important causative factors (Gunnel et al, 2000; Khan, 2002; Jones et al, 2014).

Suicide and attempted suicide imposes a huge social, emotional and economic burden on the family and society (Hawton et al, 2001; Kessler et al, 2005). Developing educational initiatives and health resources seems a sensible step towards developing services for those who have attempted to harm themselves which may start with the very staff involved in their care. 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 (Nebhinani et al, 2013).

Methodology

The study was done simultaneously in two hospitals during a two months period in 2014. KR Hospital, a tertiary care government hospital attached to the medical college which is a referral centre for almost 5 neighbouring districts. And the second hospital was the CSI Holdsworthmemorial hospital which is a Christian missionary run hospital with all the super specialty care available.

The questionnaires were sent across to the hospital staff, which included the consultants, post raduates/ casualty medical officers, interns, staff nurses and medical and nursing students(*n*=773).

Since the study was explorative we had not calculated any sample size, and took 60 consultants, 84 staff nurse, 113 PG/CMO s, 100 interns, 192 MBBS students and 224 nursing students

The validated questionnaire consisted of 30 statements regarding DSH which measured the attitudes regarding self harm. The initial 23 questions were taken from the prior study (Karen Cough et al 2000). 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 agreed on a 5 point Likert scale which was 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 was collected emphasising 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 towards handling the patients who self harm. The higher the score, the more positive the attitudes held towards patients who self-harmed.

Results

Table: Socio Demographic details of the sample

		Consultants N (%)	Staff Nurses N (%)	PG's & 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)**

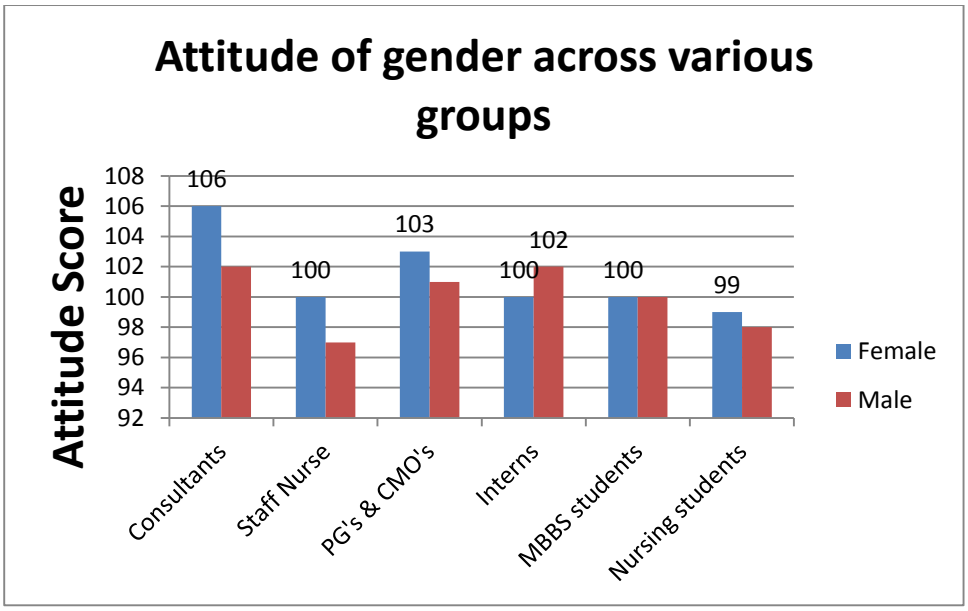
In the study, the males outnumbered females in almost every group except the staff nurse and the nursing student groups. All the groups had majority from Hindu religion, but one notable aspect was about 40% of Christians in thenursing students group. Majority were married among the consultant and staff nurse groups, while the PG's and CMO's group had a mixed group of married and single status. As expected majority were single in the rest of the groups. In the education attained, nursing staff had unfortunately not filled in properly and among the nursing students, there were majority from the diploma nursing. Amongst the consultants, postgraduates were majority with graduates predominating among the PG's and CMO's group.

The scores on the attitude towards suicide across various groups were as follows

A total of 52 participants responses were excluded as they had not completed the questionnaire with a response rate of 93.27% .The higher the score, the better was the attitude. The maximum scores were noted across the consultants (103.44) followed by the post graduates and casualty medical officersgroup (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 for a total score of 150.

	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 & 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**

Gender and attitude scores towards suicide



The female sex scored better on the attitude towards self harm patients in all the groups, except the Interns group. However, this difference was not statistically significant in any of the groups.

Staff Nurse and their attitude scores towards suicide

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. But the scores across the groups were not significant (p=0.8).

Nursing Level	N	Mean	Standard Deviation	Minimum	Maximum
Junior	24	100.57	6.081	88	108
Middle	16	100.07	8.818	85	115
Senior	44	99.49	5.982	82	116
Total	**80**	**99.90**	**6.507**	**82**	**116**

P=0.8

Education and attitude scores towards suicide

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

Group	Education Level	N	Mean	Standard Deviation	'P'
Consultants	Doctorate	3	100.33	6.658	0.7
	Postgraduate	52	103.62	7.212	
	Graduate	2	103.50	0.707	
	Total	**57**	**103.44**	**7.036**	
PG's & CMO's	Postgraduate	25	102.6	10.352	0.8
	Graduate	84	102.08	8.930	
	Diploma	1	106.00		
	Total	**110**	**102.24**	**9.192**	
Nursing Students	Postgraduate	4	95.75	7.089	**0.02**
	Graduate	20	103.30	7.124	
	Diploma	78	98.59	7.098	
	Total	**102**	**99.4**	**7.314**	

History of suicide in family and friends and Attitude

The attitude towards 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 score of 99.91. The scores were statistically significant (p<0.002) across the Interns group.

Group	History of suicide in Family and /or friends	N	Mean	Standard Deviation	'P'
Consultants	No	39	103.05	6.813	0.6

	Yes	**18**	**104.28**	**7.630**	
Staff Nurse	No	77	99.91	6.440	0.4
	Yes	**7**	**97.43**	**7.678**	
PG's & CMO's	No	85	101.96	9.250	0.8
	Yes	**26**	**102.62**	**9.356**	
Intern's	No	72	100.33	7.797	**0.002**
	Yes	**24**	**105.00**	**5.365**	
MBBS students	No	172	99.84	7.555	0.5
	Yes	**20**	**101.15**	**8.833**	
Nursing Students	No	157	99.02	7.893	0.3
	Yes	**19**	**101.21**	**6.713**	

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 towards 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 the only group who had statistically significant value of $p<0.001$.

Discussion

Negative attitudes towards those who self-harm are reported as common among nurses (Jones et al, 2015; Karman et al, 2015). The influence of professional's age, gender, personal and work related experience remains unclear to date. Professional qualification and level of qualification may be positive influences on attitudes towards self-harm.It is argued that a major change is needed regarding certain staff group attitudes towards those who undertake DSH, and calls for education initiatives to be made widely available, that challenge stereotypes and negatives beliefs and modify them. Professional interventions are based upon a therapeutic relationship and partnership with patients irrespective of the health concern or treatment context. If these negative held beliefs and limited or inaccurate 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 towards patients who self-harm have investigated specific professional groups,i.e., nurses or doctors (Anderson, 1997) or the accident and emergency (A & E) team (MacKay and Barrowclough , 2005). 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 which had 1248 participants and the Palmer and Strevens, 2006 study with 968 participants (Ghodse, 1978; Palmer and Strevens, 2006). Both these studies were undertaken on A & E staff unlike the present study across general hospital staff. Among the handful of studies

available in general hospital staff, the present study has the highest number of participants. The additional group in our study befitted from the inclusion of interns which is present in only one earlier study done in Australia (Goldney and Bottrill, 1980).

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 and CMO's and the interns group scored better than the nursing groups outlining that the doctors, in general, had better attitudes towards self harming clients 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 (Welu 1972; Ramon et al., 1975; Goldney and Bottril, 1980; Jeffrey and Warm, 2002; Mackay and Barrowclough, 2005). Psychiatrists were found to be more positive in their attitude towards those who self harm than doctors of other specialties (Platt and Salter, 1987; Commons Treolar and Lewis, 2008) and the participation of 6 psychiatrists among the consultants group need to be further considered.

The PG's and the CMO's are the frontline staff who deal directly with the patients who self harm and the emergency staff are known to be less sympathetic than other staff towards people who self-harm (Suokas and Lonnquist, 1989). In our study, the attitude score of the PG's and 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 they are getting with the regular teaching and the following up of the curriculum.

The scores of attitudes of the nursing groups consisting of the staff nurses (99.7) and the nursing students (99.29) was 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 service and also influencing the effectiveness of treatment (Hawton et al,1981). These findings were no different from the earlier findings of negative attitudes in nurses towards self harm patients (Ramon et al, 1975, McLaughlin 1994). This can be attributable to the lack of training and also due to the lack of mandatory update of knowledge to the nursing staff. A notable study in UK showed positive attitudes in community mental health nurses and in an A & E department nurses (Anderson, 1997). The same study had shown no significant variation in attitudes in relation to age, but negative attitudes in senior

nurses working in community which is replicated in our study with scores on attitudes having dipped with the seniority or with the years of experience. The maximum scores of 100.57 are seen with the junior nursing staff compared with the least scores of 99.90 amongst the senior nursing staff. The same has been seen in general hospital settings with negative attitudes correlating with greater experience (Ghodse, 1978; Friedman et al, 2006). On the contrary, there have been studies showing improvements in attitude with experience especially in psychiatric settings (Gurrister and Kane, 1978; Samuelsson et al, 1997; Huband and Tantam, 2000). 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 much better than a finding in three Indian studies where only half of the students had positive attitude (Nebhinai et al, 2013; Nebhinani et al, 2013; Jones et al, 2014).

The mean scores on attitudes have been largely better with females across all the groups except the interns where the males (102 vs 100) have 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 (Ghodse, 1978; Samuelsson et al, 1997; Anderson et al, 2000). The gender role association (male doctors and female nurses) is consideration in the present study.

Thus far, from the review of the available literature, there are no studies that have examined staff educational attainment levels, or whether it has any effect upon the attitudes towards patients who self harm. This study investigated that aspect but found no significance in any groups except with the nursing students which was difficult to explain. But this may have been due to the gross disparity in the number of participants distributed across from diploma, degree and post-graduation qualified staff. Another interesting aspect of this study was in the examination of the influence of a family history of suicide or friends upon the attitudes towards patients who self harm. It is interesting that more positive participant attitudes are held when a suicide has occurred in the family across all the groups. Between participant differences was statistically significant only in the interns groups and the most worrying was again the lowest mean attitude scores 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 non-trained ones.

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