ORIGINAL RESEARCH PAPER

Management

SATISFACTION SURVEY OF ATTENDANT OF PATIENTS ADMITTED IN INTENSIVE CARE UNIT OF TERTIARY CARE GOVERNMENT HOSPITAL IN INDIA

KEY WORDS:

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INTRODUCTION

"Quality care" by Institute of Medicine has been defined as safe, timely, effective, efficient, equitable, and patient-centred care. '"–(1) Patient-centeredness is a complex concept which is reflected in how satisfied patients and their families are with healthcare that they have received. The patient centred model includes both professional care as well as building a good rapport with the patients and their families. Establishing good relationships improves patient care, clinical outcomes and hospital image.(2)

The critically ill patients admitted in ICU are generally not in a condition to make their own decisions either due to illness or delirium. The ICU setting is a stressful environment due to frequent uncertainty, complex technologies, interdisciplinary decision making, and high patient mortality. The family members or patient's attendant play an important role in daily decision making, participation in health care and personal support. And most often, their needs, expectations and satisfaction levels are side-lined or ignored due to the overworked hospitals and staff. This can lead to anxiety, depression and PTSD among the family members of the patient.(3) Meeting the needs of family's members of patients in the intensive care unit (ICU) is a primary responsibility of ICU physicians and nurses and an important criterion in the assessment of the quality of care in the ICU. The satisfaction of family members with ICU care, decision-making and information, and their empowerment to contribute towards patient care as near relatives, is being perceived as an important aspect of the general quality of ICU care.(4)

While the literature is abundant on patient satisfaction surveys, however, the satisfaction level of a patient's attendant who plays an essential role in the treatment process of the patient also needs highlighting. The study was carried out to assess the satisfaction of the family members/attendants of the adult patients admitted in ICU of the tertiary care hospital of Western Maharashtra.

MATERIALS AND METHODS

The present study was a prospective analysis of patient's attendants (n=57) who were admitted in ICU from April 2018 to Jun 2018 at a tertiary care hospital of Western Maharashtra. Only one attendant of all the patients admitted in this study period was interviewed. The study was approved by the institutional ethical committee and the prior consent was taken from the patient's attendants. The data was collected by the principal investigator using FS-ICU-24 Questionnaire.(3) Family Satisfaction in the Intensive Care Unit 24 (FS-ICU 24) survey consists of two domains (overall care and medical decision-making). This scoring approach provides a total satisfaction score (24 items), as well as subscale ratings for satisfaction with care (14 items) and satisfaction with decision making (10 items). Each item asks family members to rate their satisfaction with a specific aspect of care (eg, "How well did ICU staff assess and treat your loved one's pain?"). All items use a 5-point Likert scale (eg, excellent, very good, good, fair, and poor), except that one item uses a dichotomous scale. All items give the response option "not applicable." Their level of satisfaction was recorded by selecting responses ranging from poor=1, fair=2, good=3, very good=4 and excellent=5. Scores were linearly transformed to range from 0 to 100.(5)

Socio-demographic details like age and sex were also obtained in the questionnaire. The date of admission and other details were recorded from the hospital records. The data was then analysed using appropriate statistical software

RESULTS

In the present study, a total of 57 patient's attendants were interviewed. The mean age of the patient's attendant was 40.35 ± 12.13 years. The age ranged from a minimum of 18 years to a maximum of 75 years. The age distribution of the patient's attendant is shown in Table 1. Among the respondents, 27 (47.4%) were males and 30 (52.6%) females. The relation of the attendants to the patients is shown in figure 1.

Table 1: Age Distribution of the Respondents

Age (years)	n = 57	%
<20	3	5.3
21-30	7	12.4
31-40	24	42.1
41-50	12	21.2
51-60	7	12.4
>60	4	7.2

Fig 1: Relation of the attendants to the patient.
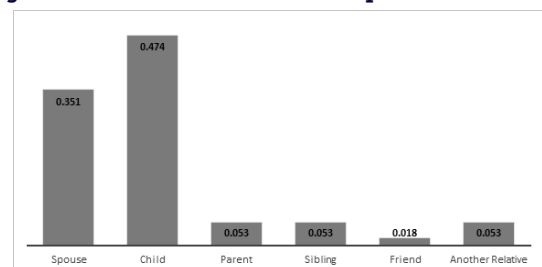
Details of the level of satisfaction are shown in Table 2 and most of the time it was excellent to a very good and good level of satisfaction. The environment of the ICU waiting area was marked poor by 24 (42.1%) respondents (17.85 ±21.58)

Table 2. Details of Patient Attendant Satisfaction.

	Excellent	Very Good	Good	Fair	Poor	Mean	SD	Median	IQR
Concern & Caring by ICU Staff	20 (35.1)	30 (52.6)	7 (12.3)	-	-	80.70	16.3	75	25
Pain Management: How well the ICU staff assessed and treated your family member's symptoms.	6(10.5)	13 (22.8)	5 (8.8)	-	-	76.04	17.25	75	18.75

How well the ICU staff assessed and treated your family member's breathlessness.	1(1.8)	6(10.5)	12 (21.1)	-	-	59.37	12.9	50	25
How well the ICU staff assessed and treated your family member's agitation.	-	11 (19.3)	13 (22.8)	-	-	59.37	12.93	50	25
Consideration of your Needs	8 (14.0))	32 (56.1)	14 (24.6)	2 (3.5)	-	71.87	20.86	75	43.75
How well the ICU staff provided emotional support	7 (12.3)	26 (45.6)	21 (36.8)	3 (5.3)	-	66.66	20.41	75	25
The teamwork of the ICU staff providing care to your family member (patient)	24 (42.1)	27 (47.4)	6 (10.5)	-	-	82.73	16.08	75	25
Concern, Courtesy, Respect by ICU Staff	23(40.4)	23 (40.4)	10 (17.5)	1 (1.8)	-	78.57	19.57	75	25
Skill and Competence of ICU Nurses: How well the nurses cared for your family member	30 (52.6)	23 (40.4)	4 (7.0)	-	-	85.71	14.75	75	25
How do you rate frequency nurses communicated to you about your family member's condition?	7 (12.3)	33 (57.9)	15 (26.3)	-	-	70.83	16.48	75	25
Skill and Competence of ICU Doctors: How well doctors cared for your family member.	39 (68.4)	15 (26.3)	2 (3.5)	-	-	90.47	13.47	100	25
The Environment/ general atmosphere of ICU	27 (47.4)	22 (38.6)	6 (10.5)	-	-	86.30	15.81	100	25
The Environment/ Atmosphere in the ICU Waiting Room	-	2 (3.5)	11 (19.3)	10 (17.5)	24 (42.1)	17.85	21.58	0	50
How satisfied are you with the level of healthcare your relative is receiving?	20 (35.1) Complete sat	24 (40.4) Very Sat	14 (24.6) Mostly sat	- Slightly dissat	- Very dissat	77.63	19.29	75	37.50
How do you rate the frequency of Communication with treating Doctors about your family member's condition?	20 (35.1)	14 (24.6)	23 (40.4)	-	-	74.54	21.77	75	50
Ease of getting information: Willingness of ICU staff to answer your questions	9 (15.8)	24 (42.1)	18 (31.6)	6 (10.5)	-	65.90	22.23	75	25
Understanding of Information: How well ICU staff provided you with explanations that you understood	11 (19.3)	28 (49.1)	17 (29.8)	1 (1.8)	-	71.81	18.66	75	25
The honesty of Information: Perceived honesty of information provided to you about your family member's condition	20 (35.1)	30 (52.6)	3 (5.3)	2 (3.5)	-	80.90	17.97	75	25
Completeness of Information: How well ICU staff informed you about what was happening to your family member and why	14 (24.6)	33 (57.9)	9 (15.8)	1 (1.8)	-	76.81	17.24	75	25
The consistency of information provided to you about your family member's condition (Did you get a similar story from the doctor, nurse, etc.)	15(26.3)	27 (47.4)	12 (21.1)	3 (5.3)	-	74.09	19.81	75	50
Inclusion in decision making process: How well the staff involved you in major decision-making process?	5 (8.6) Very Included	31 (53.4) Slightly included	21 (36.2) Neither Included nor excluded	- Slightly excluded	- Excluded	67.98	15.49	75	25
Supportduring decision making process: How well ICU staff supported you when major decisions were made?	5 (8.6) very supportive	31 (53.4) somewhat supportive	21 (36.2) Neither	- slightly unsuppoerted	- unsupported	67.98	15.49	75	25
How do you rate your control over the patient care activities for your family member?	4 (6.9) Good Control	34 (58.6) Adequate Control	20 (34.5) Neither	- Some Control	- Out of Control	67.98	14.75	75	25
When making decisions, did you have adequate time to have your concerns addressed and questions answered?	50 (86.2) Had adequate time	7 (13.8) More time required	-	-	-	85.96	35.04	100	0

Characteristics of the FS-ICU-24 overall family satisfaction score and domain scores are summarised in Table 3. The responses to pain, breathlessness and agitation management were less than 70%. Thus, the FS-ICU/Total score excluding the three questions of care domain (pain, breathlessness and agitation management) is 73.57 ±19.83.

Table 3: FS-ICU_24 overall family satisfaction and domain score

Score	Mean SD	Median
Overall Family Satisfaction (FS-ICU /Total)	72.55±14.27	75
Satisfaction with Care Domain (FS-ICU/Care)	73.44± 9.79	75
Satisfaction with Decision- making domain (FS-ICU/ Domain)	73.39± 6.826	75

On performing chi-square test, the association between the relationship of patient's attendant and pain management was found to be statistically significant (chi-square value 25.82, p-value = 0.04). Also, the association between the relationship of patient's attendant and completeness of information was found to be statistically significant (chi-square value 30.355, p value=0.011). None of the other parameters showed any significant association with patient's attendant relation, gender and age.

DISCUSSION
The ICU family satisfaction carried out in our study showed the overall family satisfaction of 72.55 ±14.27. The scores for FS- ICU/Care and FS-ICU/ DM were 73.44 ±9.79 and 73.39 ±6.826 respectively. Another study done by Lam et al showed the FS- ICU/Total as 72.8 ± 17.2. (2). The results are almost similar to our study. The similar studies conducted in Germany and America showed better satisfaction scores of 78.3 ± 14.3 and 76.6 ± 20.6 respectively. (6)(7). These can be owed to the fact that both Germany and America are developed countries and have better healthcare infrastructure. Also, the cultural differences and better doctor- nurse and patient ratio in developed countries can be attributable to these differences.

The mean age of the patient's attendant in our study was found to be 40.35 ± 12.13 years. The studies done in Canada and the US by Wall et al showed a mean age of 54.2 ± 14.4 years. (5)(2). The study conducted in Hong Kong by Lam et al showed the mean age of 47 years. Most of the attendants in our study were children of the patients, 27 (47.4%). Similar results were found in the study conducted by Lam et al. However, in the study conducted by Wall et al, the attendants were found to be mainly spouses. The differences can be attributed to the fact, that India is a traditional society, and children are expected to take care of their parents.

In our study, a statistically significant association between patient's attendant relation and pain management by the staff was found in the FS-ICU/ Care domain. None of the prior studies found any association between respondent's characters and satisfaction. In the FS-ICU/ DM domain, the relationship of the patient's attendant was found statistically significant with the completeness of the information. Communication to the attendants plays an important role in family satisfaction. This has been emphasised in various studies. (8) The emotional attachment to the patient varies with the kind of relationship the attendant shares with the patient. Thus, the pain management perceived by a spouse or child may be less as compared to that of a friend or any other relative. The same also holds true for the completeness of info wherein the spouse/parent would be wanting more and more information regarding the patient's health and prognosis.

In our study, the family's satisfaction level on assessment and treatment of family member's breathlessness and agitation scored less (59.37 ±12.93) as compared to other studies (5).

The response rates in these two question of the FS-ICU/Care domain were< 70%. The Not applicable responses for these two questions on breathlessness and agitation management were 57.7% and 66.6% respectively, thus, bringing a difference in the results.

The overall grading in our study was found to be very good. However, in response to the ICU waiting area, the response was mostly poor 24 (42.1%). This was not similar to any other previous studies(2). This highlights the importance of improving the environment of the waiting area of the ICU as well, as it drastically affects the family's satisfaction level.

The study has its own limitations. First, the study was carried out in a single centre of a tertiary care hospital of Western Maharashtra. Thus, the generalisability of the results to the other hospitals may not be appropriate. Also, the respondents were those whose sick members were still undergoing treatment in the hospital. Therefore, they might have given socially acceptable answers resulting in social desirability bias.

CONCLUSION
Family satisfaction data provide one indicator of the quality of care. Patients and relatives are the best sources of information on the various aspects of professional health care as well as the soft skills and rapport building of the health care workers. The satisfaction levels of the family members were mostly comparable to other studies. The factors identified like the waiting area of ICU and other independent factors associated with the family member's satisfaction can provide the right direction for hospital improvement.

RECOMMENDATIONS
To improve the satisfaction level among the attendant measures were suggested like Provision of information booklets to attendants, informing about the ICU visiting hours, dos' and don't and information about treating physicians and nursing staff. Physicians to have a must formal interaction with the family members explaining the prognosis and modality of treatment planned. Attendants and relatives can be included in the daily care of the patient along with the nursing staff. A provision for the availability of a counsellor around the clock to interact with the family members to allay their anxiety and fear would greatly improve the satisfaction. Improvement of waiting area amenities and a feedback system for overall services provided to the patient and attendants would act as a quality improvement measure.

Conflict of interests
The authors declare that they have no conflicts of interests.

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