PATIENTS’ SATISFACTION WITH THE QUALITY OF DERMATOLOGY CONSULTATION OF A TERTIARY CARE HOSPITAL OF PAKISTAN

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ABSTRACT

Objective: To determine the satisfaction rate of dermatology patients, after purposefully improving the consultation skills of residents.

Study Design: Mix-method study.

Place and Duration of Study: Department of Dermatology, Combined Military Hospital Lahore, from Jan to Sep 2020.

Methodology: Empathy informed curriculum was delivered by the consultants and senior registrars prior to the conduction of study as well as an ongoing process to the post-graduate trainees in the department. Patients’ satisfaction with the quality of dermatological consultation was assessed by consultation and relational empathy (CARE) measure. One hundred and seventy six patients were recruited during the study period. Descriptive statistics such as frequencies, means, standard deviations and percentages were determined from the data. Advanced level analysis was done by Pearson’s correlation coefficients to analyse relationships between variables.

Results: The mean age of study participant was 39.01 ± SD 19.81 year, with a minimum of 3 years and maximum of 91 years. Ninety two (52.3%) patients were male and 84 (47.7%) were female. The mean consultation and relational empathy score was 40.34 ± SD 8.56 with 16 minimum score and 50 maximum. One hundred and sixty six (94.3%) patients were overall satisfied with the consultation whereas 10 (5.7%) were not.

Conclusion: We found high satisfaction rate amongst patients attending dermatology outpatient department. Empathy informed curricula should be emphasized upon to provide holistic patient care.

Keywords: Compassion, Consultation and relational empathy (CARE) measure, Consultation, Dermatology, Empathy, Mix method study, Patient satisfaction.

INTRODUCTION

It is well known that patients consider empathetic care as an integral component of a healthcare system. They consider it top priority while rating their satisfaction1. Similarly, patient satisfaction is an important indicator of quality of care of any health care provider as an individual as well as an institute2. Any institute proclaiming to offer holistic patient care rely on empathetic and compassionate healthcare professionals, in addition to the knowledge and skills in the scientific domain. Compassion and empathy are closely linked terms in patient care. Empathy has been defined as the ability to sense, feel and understand another’s emotions whereas compassion has been defined as an emotional response to other’s sufferings with an authentic desire to help3. Studies have dispelled the notion of these being inherent traits, uninfluenced by environment. These traits can be nurtured and enhanced by appropriate training interventions4,5. With compassion and empathy health care providers are concerned, respectful and work within a broader relationship framework towards their patients. They contextualize patients as individuals, not mere diagnosis or a number6.

Numerous benefits of empathetic communication/consultation are well documented in medical literature. It lays the foundation of an effective patient-doctor relationship. It ensures greater compliance to medical instructions, improves patients’ quality of life and reduces depression7. Such healthcare providers are considered more professional and competent and have decreased chances of complaints against them.

It is imperative that curriculum developers at undergraduate and postgraduate levels focus on empathy informed curriculum; aiming a purposeful improvement in compassionate, empathetic and effective communication skills of physicians enabling delivery of holistic patient-centred care8. Tools for assessing physician empathy have long been employed in healthcare profession. They include Barret-Lennard empathy subscale (BLESS), Reynolds empathy scale (RES) and consultation and relational empathy (CARE) etc. The first two are primarily used by psychiatrists and nursing
staff. CARE measure was introduced for general physicians and later used by other primary and secondary care settings, nursing and other allied health professionals\(^4\). It is a patient rated measure having ten items with a short explanation of each. It is a simple, reliable, feasible and valid measure and tested across patients of all socio-economic groups. We have used this measure to determine the satisfaction rate among patients attending dermatology OPD after purposefully aiming to improve the consultation skills of the residents.

**METHODOLOGY**

This mix-method study was conducted at the department of Dermatology, Combined Military Hospital Lahore, from January to September 2020. The aim of study was to determine the patients’ satisfaction with the quality of dermatological consultation of a tertiary care hospital of Pakistan, after the approval of the hospital’s ethics review committee (221/2020). Sample size was estimated by sample size calculator, with confidence interval of 95%, margin of error 7% and reference satisfaction of patients as 63%\(^10\). The sample size was calculated to be 173 patients. No patients, including those with depression or multiple comorbidities, were excluded from the study as we wanted to take a snapshot of factual Outpatient department functioning. We selected patients randomly. They were recruited by probability systematic sampling technique. It was done by requesting every 3rd patient reporting to the reception desk after consultation by a dermatology consultant or registrar, to participate in the study by filling the form anonymously. In case the patient refused, the next patient was requested to do so. Written informed consent from the patients was taken prior to filling the questionnaire. Before and during the study period the consultants delivered empathy informed curriculum to the residents undergoing training in the department. The strategies employed included role modelling and mentoring by the consultants and senior resident for the junior colleagues. Emphasis was placed on exhibiting compassion while interacting with the patients; not just on biomedical inquiry and explanations. Aim was that the young doctors imbibe the importance of physician-doctor relationship while observing the consultants during their interactions with patients i.e. seniors as role models. During teaching sessions psychosocial impact of illnesses were discussed in some length along with importance of body language and demeanour while interacting with patients. Similarly, chosen articles about patients’ contribution in medical training were disseminated through e-mails for critical analysis and short discussions before the start of the study. These strategies were not labelled as teaching activities as a means to enhance professionalism; an approach supported by medical literature\(^11\). Furthermore, formative assessment methods like mini Cex were employed to enhance professionalism, communication/counselling skills of the residents; in addition to traditional focus on history taking and physical examination\(^12,13\).

We used the CARE measure which has 10 items, followed by an overall satisfaction question at the bottom along with free space for any optional comments\(^9,14\). Each one was rated on a 5-item response scale; 1=poor, 2=fair, 3=good, 4=very good and 5=excellent. In addition there was an additional column of ‘not applicable’. The tool’s author has suggested that if for two items there were missing data or not applicable option was chosen it was acceptable to include that patient’s form and to put average score of the rest of the items in those missing places. However, if there were ≥3 or more missing and/or ‘not applicable option’ chosen that form shouldn’t be included in the analysis. The minimum total score was 10 and maximum was 50. Patients’ comments provided an opportunity to gain an insight into patients’ perspective; understanding why or what they considered important in a physician-patient interaction. Their comments are the qualitative data which were analysed manually. Themes were identified and reported.

The quantitative data were analysed by SPSS-20. Descriptive statistics such as frequencies, means, standard deviations and percentages were determined. Advanced level analysis was done by pearson’s correlation coefficients to analyse relationships between variables. Significance values p-value ≤0.05 were considered statistically significant.

**RESULTS**

A total of 176 patients participated in the study, as shown in table-I & II. In none of the forms, ≥2 entries were missing so all were included in the statistical analysis. The mean age was 39.01 ± SD 19.81 year with a minimum of 3 years and maximum of 91 years. Ninety two patients (52.3%) were male and 84 (47.7%) were female. The patients were further stratified into serving and retired employment categories and their type of entitlement; whether they were serving in the organization themselves (labelled as ‘self’) or they were spouse, child or parent of the person serving in the organization. Out of the total study patients 108 (61.4%) were in the serving category and 68 (38.6%)
were in the retired category. Out of the 176 patients 64 (36.4%) were self, 24 (13.6%) were parent, 40 (22.7%) were spouse and 48 (27.3%) were children. According to the educational qualification, the patients were subdivided into two groups; 1) undergraduate and 2) graduate and above. Ninety one (51.7%) of the study participants were graduate or above and 85 (48.3%) were undergraduate.

Table-I: Characteristics of the study participants.

| Patient Characteristic | n (%) | Total |
|------------------------|-------|-------|
| Gender                 |       | 176   |
| Male                   | 92 (52.3) |       |
| Female                 | 84 (47.7) |       |
| Employment Status      |       |       |
| Serving                | 108 (61.4) |       |
| Retired                | 68 (38.6) |       |
| Type of Entitlement    |       |       |
| Self                   | 64 (36.4) |       |
| Spouse                 | 40 (22.7) |       |
| Parent                 | 24 (13.6) |       |
| Child                  | 48 (27.3) |       |
| Level of Education     |       |       |
| Graduate or above      | 91     |       |
| Undergraduate          | 85     |       |

The mean CARE score was 40.34 ± SD 8.56 with 16 as minimum score and 50 maximum. In our study, 45 patients (25.6%) gave the maximum score of satisfaction. Out of 176 patients 166 (94.3%) were overall satisfied with that day’s consultation whereas 10 (5.7%) were not. None of the study participants chose the option ‘not applicable’, indicating they found all the items of questionnaire relevant.

On overall cross tabulation, by gender 7.6% males (7 out of 92) were unsatisfied, whereas 3.5% females (3 out of 84) were not satisfied with the treatment. Employing the pearson chi square test the statistical difference based on gender was found to be insignificant (p=0.248). The difference amongst serving and retired personnel and their families was found to be statistically significant (p=0.055) with 8.3% (9 out of 108) amongst the serving category and 1.5% (1 out of 68) amongst the retired category being unsatisfied with the consultation. Dividing the study population based on the education level 89 (97.8%) of the graduate or above were satisfied with the consultation as opposed to 77 (90.59%) of the undergraduate group. This was found to be statistically significant (p=0.039). Among entitlement categories, spouses and children were mostly satisfied with the consultation, with only 2.5% and 4.17% showing their non-satisfaction respectively. In contrast 16.67% of the parents weren’t satisfied with consultation.

Forty four out of the total patients i.e. 25% gave comments. They showed appreciation as well as non-satisfaction with consultation. They also mentioned factors beyond physician consultations influencing their judgement. Themes identified from the qualitative data are the following:

Table-II: Cross tabulation results of the study participants’ satisfaction with consultation.

| Patient Characteristic | Sample Size (%) | Percentage | Satisfied (%) | Unsatisfied (%) | p-value |
|------------------------|-----------------|------------|---------------|-----------------|---------|
| Total                  | 176             | 166 (94.3) | 10 (5.7)      |                 |         |
| Gender                 |                 |            |               |                 |         |
| Male                   | 92 (52.3)       | 52.3       | 85 (92.4)     | 7 (7.6)         | 0.248   |
| Female                 | 84 (47.7)       | 47.7       | 81 (96.4)     | 3 (3.6)         |         |
| Age Group (Years)      |                 |            |               |                 |         |
| <18                    | 25 (14.2)       | 14.2       | 23 (92)       | 2 (8)           |         |
| 18-45                  | 88 (50)         | 50         | 84 (95.5)     | 4 (4.5)         |         |
| 46-60                  | 35 (19.9)       | 19.9       | 32 (91.4)     | 3 (8.6)         |         |
| >60                    | 28 (15.9)       | 15.9       | 27 (96.4)     | 1 (3.6)         |         |
| Employment Status      |                 |            |               |                 | 0.055   |
| Serving                | 108 (61.4)      | 61.4       | 99 (91.7)     | 9 (8.3)         |         |
| Retired                | 68 (38.6)       | 38.6       | 67 (98.5)     | 1 (1.5)         |         |
| Type of Entitlement    |                 |            |               |                 |         |
| Self                   | 64 (36.4)       | 36.4       | 61 (95.3)     | 3 (4.7)         |         |
| Spouse                 | 40 (22.7)       | 22.7       | 39 (97.5)     | 1 (2.5)         |         |
| Parent                 | 24 (13.6)       | 13.6       | 20 (83.3)     | 4 (16.7)        |         |
| Child                  | 48 (27.3)       | 27.3       | 46 (95.8)     | 2 (4.2)         |         |
| Level of Education     |                 |            |               |                 | 0.039   |
| Graduate or above      | 91 (51.7)       | 51.7       | 89 (97.8)     | 2 (2.2)         |         |
| Undergraduate          | 85 (48.3)       | 48.3       | 77 (90.59)    | 8 (9.41)        |         |
i) **Positive qualities of doctors leading to patients' satisfaction:**

Certain doctor’s characteristics like competency, empathy, compassion, polite mannerism, patient listening, explaining about disease and management plans are greatly appreciated by patients: some of their comments were:

I found the doctor very competent. She was patient with my daughter who was extremely reluctant for examination (12); very considerate, very good listener and full of compassion (35); very helpful doctor and explained everything in detail (77); I greatly appreciate the doctor listening patiently to my complaints and explaining things clearly to me (98); I am an old patient of skin ailments off and on and have found them most professional and cooperative (171); polite and well behaved having a full command on her subject (172).

ii) **Negative qualities of doctors leading to patients' non-satisfaction:**

Certain doctors’ characteristics are found offending by the patients e.g. giving the impression of not genuinely interested in patients; rather focused on finishing the OPD, looking at the computer screen all the time during consultation and inability to make the patients understand their disease and management plans. Some of the unsatisfied patients’ comments were:

Doctor was looking at the computer screen more and typing rather than looking at me (3); the doctor had problem with data entering and preoccupied with it (121); the doctor appeared to be in a hurry to see all patients. I wanted to tell her more about my disease (19); doctors are overburdened because of rush (43) we have come to opd for 5-6 times but the condition hasn’t been cured (142).

iii) **Other facets of the clinical environment contributing to patients' satisfaction:**

Although the CARE measure is clearly about the satisfaction with that specific physician’s consultation, the patients mentioned facets beyond the doctors’ attributes leading to their satisfaction or otherwise. Some of the comments about the whole dermatology department were:

Conduct of nursing staff and receptionist showed considerable improvement (46); excellent friendly atmosphere (52); satisfied with the doctor but the waiting area is hot (127); waiting area gets very crowded (10); good experience. We found all the staff quite helpful (153); I had to wait very long for my turn (11); very hot waiting area which made my itching worse though the doctor was nice (18).

**DISCUSSION**

A quintessential component of medical care is the patient-doctor interaction. Lately, lot of emphasis is being placed on patients’ views on the level of care they receive. Patients’ satisfaction with healthcare facilities is vital for overall management of their condition. Medical institutes need to be aware of the importance of robust curricula for under-graduate and post-graduate students to cater to this requirement. Teaching strategies can be didactic lectures, small group discussions, workshops, role playing, standardized patients’ interviews and real patients’ interactions. Studies evaluating long term effects of formal curriculum are generally lacking. The clinical environment, though busy, is an important learning site. It is this challenging environment that ensures that healthcare professionals are appropriately trained to deliver safe, efficient and effective patient care, through formal, informal and hidden curricula. The senior doctors need to be aware that their consultation styles play an important role in inculcating compassionate and empathetic behaviours in young doctors. However, systematic reviews by Kelm et al\textsuperscript{16}, Neumann et al\textsuperscript{17}, have shown empathy declining as medical students progress in medical school and further during residency programme. Study by Tariq et al\textsuperscript{18}, have shown similar declining trend in Pakistan. This negative trend is alarming. Compassionate physician consultation is extremely important in dermatology practice. Apparently dermatological conditions may be taken as trivial and non-life-threatening, but they have huge impact on patients’ mental well-being. Furthermore, many of the dermatological conditions have a chronic course and require active patient involvement for effective drug compliance. The patients are more compliant with treatment plans if they are satisfied with their consultation.

Empathetic patient care has been associated with feeling of well-being and lower burn out rates in physicians. Conversely it has also been associated with anxiety and depression among health professionals. It is imperative to understand prevailing dynamics of different societies, cultures, institutes and even specialties. Certain studies have focused on empathy and compassion and suggested that training of physicians should not only be on the lines to feel the distress of the other person (empathy). Rather they should be trained to proactively help other individual (compassion). Studies by Klimecki et al\textsuperscript{19}, and Lamm et al\textsuperscript{20},
found that functional Magnetic Resonance Imaging (fMRI) showed centres for pain were activated when a person experienced empathy, whereas reward pathways were activated when compassion was focused upon. These studies indicate compassion as a superior trait to empathy; not only feeling patients’ plight but the willingness to help them out makes it more meaningful and fulfilling.

The CARE measure has established itself as a feasible tool to measure patient satisfaction with the consultation. It is quick, easy to fill, having face value and not hampering the function of a busy patient OPD. In our study none of the forms were discarded due to being incompletely filled; indicating patients’ willingness and finding them easy to fill. Furthermore, none of the patients ticked ‘not applicable’ from the possible answers, indicating they found each statement relevant with their physician’s interaction. It shows the importance given to empathetic consultation by patients. Our study aimed to determine the efficacy of the teaching strategies employed by seniors to assess objectively overall patients’ satisfaction with their consultation. Holding regular, meaningful communication skills workshops is not a feasible option. Rather, opportunities in workplace should be capitalized e.g., by role modelling and putting an emphasis on the psychosocial impact of the illnesses. We stress on a greater need to focus on the consultation style by the physician to improve the quality of care.

Generally we found high satisfaction rate amongst patient attending dermatology OPD. Study on nursing care by Karaca et al., showed that young adults, age bracket 18-35 years and of college/university education were more satisfied than others. Their mean age was 48 years with 77.3% being female and 63.9% finding the nursing care excellent. In another study conducted by Syed et al., on 53 women undergoing C-section in a tertiary care hospital found 28.3% of the patients were unsatisfied by the counselling provided by the healthcare provider before the operation.

Previous studies have indicated that patients’ education and socioeconomic level affect the patient-doctor relationship. Syed et al., found that 44.8% of their undergraduate and 17.9% of the graduate patients were dissatisfied by the counselling offered to them. Significantly, 52.4% of their undergraduates study participants found health care workers’ language using medical jargons hard to understand. In this study too undergraduate patients group was less satisfied with the consultation. This puts an onus on the medical educationists for proper development of curricula for under and post graduate students, enabling students to be aware of the local community’s language and to make effort to get their message across with minimum use of difficult medical terms.

CARE measure has been carefully crafted and was initially developed for primary care doctors. After it established its usefulness it was further extended to secondary care physicians, nurses and other paramedical staff. Modified tool, the ‘Visual CARE Measure 5Q, 10Q and 10Q Parent’ became available for paediatric population and people with additional special needs. The 10 Q and 10Q Parent are different in only the wording depending whether addressed to the adolescent or the parent. In our study, we have used the adult version in the paediatric group with parents/guardian filling the form on their behalf. At a quick glance the items in the CARE measure appear as based on patient-centred consulting style which may not be the most appropriate consulting style for everyone. Studies have shown that people from lower socio-economic status and from certain eastern countries prefer more directive consulting style i.e., patient taking less autonomy for their management decisions and relying on the doctor to make the best management plan for them. This expectation is quite common in our country. The CARE inventors have provided short explanatory phrases to cater for this difference in consulting style. This makes it flexible, permitting to be used according to the patients’ desire.

In the study by Bikker et al. the mean CARE measure score was 45.9 which is considerably higher than our study. Furthermore, 48% of the patients gave maximum 50 scoring, which in our study was 25.6%. Factors like time spent with the patient and knowing the paramedical staff previously contributed significantly, in their study, in determining the satisfaction score given by the patient. Similarly, in their study 9.8% of the total patients had 3 or more missing or not applicable responses and they weren’t taken into account in the data analysis. All questionnaires were analyzed in our study. We can postulate that addition of those missing data might have skewed their results. Similarly, while comparing the results we need to take account of the resources available in different institutes and regions. We have not taken the length of consultation into consideration and it’s a known fact that we are a populous country with limited resources and our patient load is much more than in the western countries.
The comments in the questionnaire have added depth and richness in the data. Interestingly, patients didn’t confine their comments about doctors’ consultation styles; rather they were influenced by the behaviour of paramedical staff and the physical environment. Some of the patients commented on the difficulties encountered by the doctors e.g. workload. Thus, satisfaction is a subjective phenomenon and patients would invariably be influenced by ancillary staff and the physical environment, in addition to the attitude of the treating physician. This reinforces the need to strengthen patient care using multipronged approach.

We suggest similar studies to be taken by other departments and institutes. The CARE measure can be used for audit purpose to assess the performance periodically of a department and even of individual physicians. Before embarking on such projects it is extremely important to understand the working dynamics of that department especially the number of doctors. The calculation of the length of the consultation time is extremely important to reach to any meaningful conclusions.

**CONCLUSION**

We found high satisfaction rate amongst patients attending dermatology OPD. Teaching strategies by seniors to purposefully improve counselling skills of the trainees resulted in overall patients’ satisfaction with their consultation. Opportunities in workplace should be capitalized e.g. by role modelling and putting an emphasis on the psycho-social impact of the illnesses. Empathy informed formal, informal and hidden curricula should be emphasized upon to provide holistic patient care.

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**CONFLICT OF INTEREST**

This study has no conflict of interest to be declared by any author.

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