ABSTRACT

Introduction: Patients in the orthopedics ward are very anxious about the outcome of their illness and residual morbidity at the end of the treatment. We conducted this study in DHQ Teaching Hospital Sahiwal to assess the level of satisfaction among patients visiting the orthopedics ward and suggest improvements that could be made to improve the situation.

Objective: The objective of this study was to investigate various factors responsible for patient satisfaction in the orthopedics ward.

Materials and Methods: A total of hundred patients were included in this descriptive cross-sectional study. The study was conducted in DHQ Teaching Hospital Sahiwal for 3 months from October 2019 to December 2019.

Results: Out of the 100 patients included in the study, 22 patients reported being unsatisfied with their ward experience, 46 patients were moderately satisfied while 32 patients were highly satisfied with ward experience. Several factors including increased consultation duration, cost-effective treatment, empathic behavior of staff, and provision of facilities in the ward all contributed towards positive patient satisfaction.

Conclusions: Patient satisfaction can be improved by empathic behavior of staff, increasing consultation duration with the patient, and improving facilities in the ward which would result in the better long-term outcome of their illness.

Keywords: Facilities and Services Utilization, Health Facilities, Orthopedics, Patient Satisfaction

INTRODUCTION

Patient satisfaction is defined as the degree to which patients are pleased with their healthcare. It is dependent on a variety of factors and has been studied from many aspects.

Rahman et al found out that patients wanted a skilled, and experienced but inexpensive doctor.[1] Proper diagnosis, free supply of medicine, good clean hospitalInfrastructure, a hospital in the vicinity to their residences positively impacted on patient and doctor’s relationship.[1] Unfortunately, the healthcare system of Pakistan is overburdened, due to which patients can't be given due time.[2]

Lack of communication is another problem in our local setups which decreases the confidence of the patient and leaves them dissatisfied. At the time of admission, all necessary information should be conveyed to the patient or attendant.[3] Several factors have a significant impact on patient satisfaction and they include informational care and counseling, post-operative pain management, nursing care, a good discharge experience, patient expectations, clearly defining the outcome, technical competency, teamwork among doctors and behavior of medical and paramedical staff.[4-7]

Dansky found that patient satisfaction was also impacted by total time spent by the patient waiting for the doctor and although it couldn't be shortened yet it could be managed effectively by keeping the patient occupied during the interval.[8] Informed consent is also known to help the patients to generate realistic expectations of the outcome of a procedure.[9]

MATERIALS AND METHODS

Setting

The study was conducted in DHQ Teaching Hospital Sahiwal for a duration of 3 months between October 2019 to December 2019.

Sample Size and Selection
A hundred patients who consented to be part of this study, were legally adults, were being admitted for the first time in any orthopedic unit and had a minimum education level of matric were included in this study. Mentally incapacitated patients, unattended patients and patients with co-morbid conditions were excluded.

**Rights and Information**
The participants were asked a series of questions regarding services provided, physician attitude, privacy in the ward, pain management, consultation duration, and other relevant parameters. They were given the right to anonymity if they did not want to reveal their identity. They were also assured that if at any stage they would like to withdraw from the study then their desire would be respected and they would be allowed to leave the study. They were inquired in separate rooms so that they could easily answer it without any disturbance from a third party.

**Grading**
Patients were asked to grade their overall level of satisfaction on a scale from 1 – 10. A score of 1-3 was labeled as unsatisfactory, a score of 4-7 was labeled as moderate satisfaction, and a score more than 7 was labeled as a high level of satisfaction.

**Data Analysis**
Data was entered and analyzed in SPSS 22.

**RESULTS**
The mean age of the patients recruited for the study was 44 years with a standard deviation of 13.4 years [Table 1]. The majority of the participants were males (65%, n=65) whereas 35% of the subjects were female (n=35) [Figure 1].

Please refer to Figure 2 for the occupation of our subjects. The fracture was the most common diagnosis (n=60) [Figure 3].

The majority (78%, n=78) of our subjects were satisfied with pain management [Figure 4].

Nearly all of our patients were satisfied with the information provided regarding diagnosis and treatment (88%, n=88) [Table 2]. Lack of privacy was regarded as the single worst thing by 28 subjects and lack of cleanliness was regarded as the single worst thing by 20 subjects [Table 3].

When patients were asked about the single best thing in the ward, the majority of them were satisfied with the food provided.

The majority of patients (82%) were satisfied with the cost of treatment and admission process [Table 5].

Regarding consultation duration, it was less than 5 minutes in the majority of our subjects and they were dissatisfied.

More males were admitted than females maybe because they are prone to road traffic accidents and occupational trauma more than females.

It can be seen that different patients have different perspectives as shown in Table 3 and Table 4. The same facilities were satisfying for some of them and at
the same time, some graded them as the worst thing about the hospital stay. Patients whose pain was well managed were thankful to the hospital staff and patients who were given adequate consultation time were more satisfied. Patients graded their overall level of satisfaction on a scale from 1- 10 and 22 patients graded their overall experience as unsatisfactory, 46 were moderately satisfied with their hospital experience and 32 patients were highly satisfied with their experience[Figure 5].

DISCUSSION
The most important criterion responsible for patient satisfaction in the ward seemed to be consultation duration which was defined as “the total time spent by the doctor on the patient”.[10] The patients who were given more time by the doctor were more satisfied as the doctor was listening to their complaints attentively and advised them according to their condition. On the contrary, the patients whose consultation duration was less than 5 minutes were very unsatisfied and rated their experience as poor. Research by Levesque showed that the patients who were given a proper diagnosis and plan during the consultation were more satisfied with the consult.[11] A study by Davis K et al compared the healthcare system in the US to five other nations namely New Zealand, the United Kingdom, Germany, Australia, and Canada, which revealed that the US health care system was underperforming and ranked last in terms of patient and physician satisfaction but was the most expensive of all of the healthcare systems.[12]

Most of the patients admitted were in their 4th and 5th decades of life which is predictive and logical as it is the stage when most of the degenerative changes are occurring in the body. The most common reason for admission was road traffic accident and on job accidents (laborers). Interestingly, in our study, majority of female patients were admitted due to osteoporotic changes. About 60% of the patients were admitted with fractures as this is the most common reason for presentation to the orthopedics ward. Patients with joint dislocations contributed 20% of the total sample.

In our study treatment expenses were not a major factor in governing patient satisfaction because in their opinion it was the government’s responsibility to bear expenses and it was the quality of health care provided to them which was important for their satisfaction. The ward had a good pain management protocol and majority (78%) of our subjects reported a satisfactory experience. The admission process to the ward was also satisfactory to 87% of patients. Patients were asked about the best thing about their stay in the ward and out of the six options, 29 percent of patients chose the quality of food. When patients were asked about the single worst thing about the hospital about 28 percent of them rated privacy in the ward as the worst. The most probable cause could be that our government hospitals are overcrowded with patients and there is a shortage of beds as well as a shortage of separate rooms for patients.
As a whole 22 patients were unsatisfied with their experience, 46 patients were moderately satisfied and 32 were highly satisfied, implying that there is room for improvement of healthcare facilities in our tertiary care hospitals.

**CONCLUSION**

Patient satisfaction level can be improved by certain factors such as appropriate consultation duration provided by the doctor, empathic behavior of staff, provision of good quality food, improved cleanliness of
ward and improvement of privacy in the ward. Appropriate pain management and proper information about diagnosis and prognosis also contributed to patient satisfaction.

**RECOMMENDATIONS**
A qualitative study with large sample size and multicentric data must be conducted to identify the factors which govern patient satisfaction. In the light of this study, efforts should be made by hospital administration to provide better facilities to the patients at the hospital. Medical and paramedical staff should be empathic to the patients. All admin registrars of wards should also play their part in the provision of a free supply of medicines and ensure adequate privacy inwards. House officers, post-graduate residents, and consultants should increase their consultation duration with the patient so that he/she feels listened to.

**LIMITATIONS OF THE STUDY**
A sample size of 100 obtained by convenience sampling was chosen to simplify the statistics. It is not a true indicator of the whole population so the power of the study might be low to generalize it to the whole population. Moreover, the study was limited to a single center and was not a true representative of orthopedic wards.

**REFERENCES**

**AUTHOR CRediT**
HI: Conceptualization, Project administration, Investigation, Methodology, Writing – original draft, Writing – review & editing
HI: Data curation, Formal Analysis, Validation, Visualization
SH: Writing – original draft

**ETHICAL CONSIDERATIONS**
This study was approved by the Institutional Review Board of Sahiwal Medical College and Allied Hospitals.