Original Research Article

Patient satisfaction and out-patient services assessment in a tertiary hospital of South Odisha, India

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ABSTRACT

Background: The out-patient department of a hospital is for patients who do not require hospitalization but have come for their health needs, either for treatment or for diagnosis. The main objective of the study was to measure the satisfaction levels of the patients attending the OPDs of MKCG medical college.

Methods: Data were collected from OPD patients through pre-structured questionnaires in the local languages at the OPD of MKCG Medical College. The data were analysed using SPSS.

Results: Out of total 100 patients interviewed, 58 were males and 42 were females. 13% respondents were "highly unsatisfied" with the OPD services where as 65% were "unsatisfied", 15% were "satisfied" and only 7% "highly satisfied". 27% of the participants were from lower socio-economic status (SES), 70% were from middle class and the rest from upper class. 100% of those belonging to upper SES, 80% of middle SES and 70% of lower SES were highly unsatisfied or unsatisfied with OPD services. Most of the patients had come to attend the departments of Medicine (25%), Paediatrics (18%), Surgery (16%) and Obstetrics and Gynaecology (15%). 45% patients were visiting this facility for the first time. 11% of these new patients were Highly satisfied with the services while 31% of repeat patients were either satisfied or highly satisfied. The median waiting time between arrival and consultation was 1 hour. 84% participants had to incur out of pocket expenses. The mean amount spent was Rs. 350. 80% of those who had spent were of the opinion that they had to spend more than what was reasonable.

Conclusions: Patient satisfaction was significantly associated with SES, repeat visits, and waiting time between arrival and consultation. Measures to reduce out of pocket expenditure and waiting time may increase satisfaction levels in patients.

Keywords: Health care services, Outpatient department, Patient satisfaction

INTRODUCTION

Hospitals have expanded in terms of availability of specialties, improved technologies and facilities. Simultaneously, competition between hospitals and the expectations of patients and their relatives have also increased many folds. Consumer expectation in any medical experience influences whether, how soon and how often they seek care and from which medical facility. Patient satisfaction is also an important and commonly used indicator for measuring the quality in health care. Patient satisfaction affects clinical outcomes, patient retention, and medical malpractice claims. It affects the timely, efficient, and patient-centered delivery of quality health care. Patient satisfaction is thus a proxy but a very effective indicator to measure the success of doctors and hospitals.

In a major report published in 2001, “Crossing the Quality Chasm”, the Institute of Medicine (IOM) set forth six aims for a quality health care system patient safety: (a) safe; (b) equitable; (c) evidence based; (d)
timely; (e) efficient; and (f) patient centered. The latter three factors directly influence patient satisfaction. The out-patient department of a hospital is for patients who do not require hospitalization but have come for their health needs, either for treatment or for diagnosis. This study was conducted to know patient satisfaction and assess Out-patient services in a tertiary hospital of South Odisha, India.

METHODS

This was a cross sectional survey conducted among patients attending the Out-patient department of MKCG Medical College Hospital, Berhampur, Odisha, India. The study period was September 2016.

Sample size

The required sample size of 100 was calculated using pre-determined service provider level sample sizes for patient satisfaction surveys with a margin of error of ±10% and a 95% confidence levels. This was based on an average patient panel size of 2300, maximized standard error and a finite population correction.

Sampling

A total of 100 participants were recruited by simple random sampling. Ten participants were recruited on randomly selected days during the month of study. The OPD registration numbers were collected 1 hour after the start of OPD services and study participants were selected from these using a random number generator app. The selected patients were approached after their consultation was over and interviewed in the local language.

Inclusion criteria

Adult persons willing to give informed consent attending the OPD; in case of children, their guardians/parents were recruited.

Exclusion criteria

Seriously ill patients, unconscious patients and mentally incapacitated patients were excluded from the study.

Study instrument

The study instrument was created by adapting three pre-validated service assessment questionnaires:

- General practice assessment survey based on GPAQ-R2 © 2014 which is used with the kind permission of the University of Manchester & University of Cambridge.
- Consumer assessment of healthcare providers and systems (CAHPS) questionnaires.

The responses were graded on a scale of 1 to 5. Total score was obtained by adding the individual responses and categorized as highly unsatisfied (score: <20), unsatisfied (score: 20-30), satisfied (score: 31-40) and highly satisfied (score: >40). The study tool thus created is given in Annexure. Socio-demographic data and data on expenses were also collected. BG Prasad scale was used to assess socio-economic status of the participants. Clearance was obtained from the Institutional ethical committee of MKCG Medical College.

Data analysis

Data was analyzed using SPSS Ver.21 in the Department of Community Medicine, MKCG Medical College. Results were expressed as proportions and Chi squared test was used as the test of significance where appropriate.

RESULTS

58 males and 42 females were interviewed for the study. The age of the participants ranged from 20 to 78 years. Mean age was 41.8 (±12.5) years. 18% respondents were illiterate, 43% had primary grade education, 29% were matriculate and 10% were graduates or above. 13% respondents were "highly unsatisfied" with the OPD services where as 65% were "unsatisfied", 15% were "satisfied" and only 7% "highly satisfied".

Table 1: Relationship between patient satisfaction and SES.

<table>
<thead>
<tr>
<th>Socio-economic status</th>
<th>Patient satisfaction levels</th>
<th>High unsatisfied</th>
<th>Unsatisfied</th>
<th>Satisfied</th>
<th>Highly satisfied</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td></td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Middle</td>
<td></td>
<td>7</td>
<td>49</td>
<td>7</td>
<td>7</td>
<td>70</td>
</tr>
<tr>
<td>Lower</td>
<td></td>
<td>4</td>
<td>15</td>
<td>8</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>13</td>
<td>65</td>
<td>15</td>
<td>7</td>
<td>100</td>
</tr>
</tbody>
</table>

χ²=16.77; df=6; p=0.01
27% of the participants were from lower socio-economic status (SES), 70% were from middle class and the rest from upper class. 100% of those belonging to upper SES, 80% of middle SES and 70% of lower SES were Highly Unsatisfied or Unsatisfied with OPD services. This relationship between SES and patient satisfaction was significant and is given in Table 1.

27% were from the local town, 40% were from the same district and the rest 33% were visiting from outside the district. Most of the patients had come to attend the departments of Medicine (25%), Paediatrics (18%), Surgery (16%) and Obstetrics and Gynaecology (15%).

45% patients were visiting this facility for the first time. 11% of these new patients were Highly satisfied with the services while 31% of repeat patients were either satisfied or highly satisfied. This difference was statistically significant ($\chi^2=30.45; df=3; p<0.01$).

Table 2: Time period between arrival and consultation versus patient satisfaction levels.

<table>
<thead>
<tr>
<th>Time between arrival and consultation</th>
<th>Patient satisfaction levels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Highly unsatisfied</td>
</tr>
<tr>
<td>&lt;30 mins</td>
<td>3</td>
</tr>
<tr>
<td>30 mins-1 hr</td>
<td>4</td>
</tr>
<tr>
<td>1-2 hrs</td>
<td>1</td>
</tr>
<tr>
<td>&gt;2 hrs</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
</tr>
</tbody>
</table>

$\chi^2=33.2; df=9; p< 0.01$

Table 3: Relationship between out of pocket expenditure and patient satisfaction.

<table>
<thead>
<tr>
<th>Out of pocket expenditure</th>
<th>Patient satisfaction levels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Highly unsatisfied</td>
</tr>
<tr>
<td>Yes</td>
<td>10</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
</tr>
</tbody>
</table>

$\chi^2=5.74; df=3; p= 0.12$

The median waiting time between arrival and consultation was 1 hour. The relationship of time period between arrival and consultation and patient satisfaction levels is given in Table 2.

84% participants had to incur out of pocket expenses. The mean amount spent was Rs. 350. 80% of those who had spent were of the opinion that they had to spend more than what was reasonable. The relationship between Out of pocket expenditure and patient satisfaction is given in Table 3.

**DISCUSSION**

Patient satisfaction surveys can serve as a feedback for the health service provider which can in turn improve the quality of health services delivered. GPAQ is a well-established and tested patient survey questionnaire which can be used for Out-patient services survey, and/or adapted for annual practice survey. CAHPS is the most widely used and survey with the most empirical research supporting its reliability and validity. O-PAHC-Modified tool for developing countries as GPAQ is mainly designed for U.K and CAHPS is for U.S.A. The study was conducted among patients attending the OPD of a tertiary level health centre. 78% of the study subjects were either very unsatisfied or unsatisfied with the OPD services.

This is different from the findings of a study conducted in North India where 87.8 % of the patients were satisfied with the OPD services of health care facilities. Similar findings were also obtained in another study conducted by Rajbanshi et al. Total satisfaction with OPD services was observed in 65.3 percent respondents in a study by Nandkeshash et al. The relationship between SES and patient satisfaction was found to be statistically significant. Similar findings were also observed in other studies where a significant relationship was found between socio economic status and patient satisfaction.

Patient waiting time in outpatient clinics is often the major reason for patients' complaints about their experiences of visiting outpatient clinics. Therefore, patient satisfaction with waiting time plays a crucial role in the process of health quality assurance or quality management.

Waiting time of less than 30 minutes was significantly associated with patient satisfaction and this finding of the
The present study was consistent with findings of Kumari et al. Association was observed between waiting time and total satisfaction and between times spent with doctor and total satisfaction by Nandkeshav et al. Increased waiting time could be addressed by application of queuing model at the registration area, consultation rooms and dispensary counter to appreciate need for additional service stations.

More than two third of the patients attending OPD incurred out of pocket expenditure and the mean amount was Rs 350. Among those who had to incur out of pocket 81% of the patients were not satisfied. But this finding was not significant. However Archana et al observed that majority of the visits to health care facilities (nearly 69% for OPD visits) did not result in out of pocket expenditure for health care and the total mean per visit expenditure for OPD visits was INR72.7±143.6. Although substantial achievements have occurred in the improvement of population health in India in the 60 years since independence most spending on health care is paid out of pocket and is rising in cost. The country’s health system ranks as one of the most heavily dependent on out-of-pocket expenditure. This however varies between states in India as health policies differ.

The degree of patient satisfaction can be used as a means of assessing the quality of health care and the personnel. It reflects the ability of the provider to meet the patients’ needs.

CONCLUSION

In the present study 65% of the patients were unsatisfied with the OPD services. Patient satisfaction was significantly associated with SES, repeat visits, and waiting time between arrival and consultation. Measures to reduce out of pocket expenditure and waiting time may increase satisfaction levels in patients. Further research into the health systems is needed to improve patient satisfaction.

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Conflict of interest: None declared
Ethical approval: The study was approved by the institutional ethics committee

REFERENCES

### ANNEXURE

<table>
<thead>
<tr>
<th>Question</th>
<th>Response Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Doctor treated me with courtesy / respect?</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>The Dr listened to me carefully?</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>The Dr. explained/made me understand my condition/situation?</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>The Dr. explained/made me understand tests/medications prescribed?</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>The Dr. explained/made me understand possible side effects?</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>The Dr gave me enough time to discuss my medical problems?</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>The OPD facilities/ Bathrooms were clean?</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>Rate the waiting period on this scale.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Rate the facility overall on this scale.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>I would recommend this facility to family/friends?</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>Total score</td>
<td></td>
</tr>
</tbody>
</table>

Tick the box that is applicable