

## **Patients' satisfaction with inpatient and outpatient aspects of care delivered at a District Hospital in Pretoria**

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### **Abstract**

Patients' satisfaction with inpatient and outpatient services is an important quality assessment measure for the delivery of health care. This study was conducted to assess the level of patients' satisfaction with the quality of inpatient and outpatient services delivered at a district hospital situated in Pretoria. This cross-sectional study sampled a population comprising adult men and women aged at least 18 years or older that attended this facility during the period from 1<sup>st</sup> June to 31<sup>st</sup> July 2014. A simple random sampling was performed on the days when data were collected using a questionnaire. In total, 366 people answered the questions about outpatient services; among them, 135 answered questions pertaining to inpatient care services. The mean age of the participants was 35.59 ( $\pm 12.15$ ) years. The minimum age of respondents was 18 years and the maximum age 75 years. The majority of the participants fell within the 31-45 age category (41.53%). The overwhelming majority of the respondents (97.54%) were Black African; 62.3% were females. It is encouraging to note over 80% of respondents were satisfied with the following aspects of outpatient care: the condition of the hospital building, cleanliness, availability of benches to sit on, how the patients were treated throughout the hospital, particularly by the clerks, nurses, and doctors. It is also good that over 50% of respondents were satisfied with all the inpatient aspects of care assessed. In particular, over 80% of respondents were happy with the cleanliness of the ward, bedding and ablutions facilities as well as feeling safe at night. In conclusion, the findings for the study suggested that the majority of patients were satisfied with the inpatient and outpatient aspects of care provided at the hospital where this study was conducted. Institutional managers and staff members should be encouraged to maintain or improve the areas of which they are doing well and take corrective actions to address the shortcomings noted. Further studies should be considered at the study site to check whether improvements have been made.

**Keywords:** patient satisfaction; inpatient care; outpatient care; district hospital; South Africa.

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## *Introduction*

Patients' satisfaction with inpatient and outpatient services is an important quality assessment measure for the delivery of health care. Several authors have proposed that, through research, potential areas in need for improvement should be identified in order to make the most effective use of available resources and apply the principles of continual quality improvement entrenched in national and international standards (Department of health, 2011).

In South Africa, the 2012 General Household Survey reported an overall satisfaction level of 57% in the public sector health services in South Africa. During the same year, the South African National Health and Nutrition examination survey (SANHANES-1) further reported satisfaction levels with inpatient and outpatient care to be respectively, 83.1% and 80.1% (Human Sciences Research Council, 2012; ).

Although these ratings appear high on a national levels, there are several discrepancies at provincial and institutional levels. A study to investigate patient satisfaction among care management and antiretroviral treatment programme (CCMT) of HIV/AIDS patients pertaining to access and quality received at hospitals in Tshwane (Pretoria West, Kalafong and Tshwane District Hospitals) Gauteng Province reported a satisfaction level of 93% with the quality of services received (Magoro et al, 2012). The highest satisfaction for CCMT service was reported for medication (93%), counseling (92%) and privacy (90%). While a study by Chimbindi et al (2014) in KwaZulu-Natal among HIV and Tuberculosis (TB) patients reported that 95% of HIV-positive patients and 97% patients suffering from tuberculosis were satisfied with quality of public service they received. Furthermore, a study of Besada (2011) looked at the quality of health care for HIV-infected women at antenatal clinics in two provinces (Western Cape and Free State) and the levels of patient satisfaction with quality of service. Women attending the facilities reported satisfaction levels of 76% in Free State and 87.8% in Western Cape Province. However, the authors noted that these women actually were dissatisfied with certain dimensions of the quality of care for example waiting times, short hours of service and overcrowding. Similarly, a study by Ogunsanwo (2012) at 6 antiretroviral treatment facilities in Mpumalanga reported an overall satisfaction rate of 97.6%; but some patients were dissatisfied about shortage of health staff, cleanliness of the facility, negative attitude of staff members and lack of privacy.

Taking gender into consideration a study by Phaswana-Mafuya et al. (2011) reported that women were more satisfied than men (75.9% versus 24%). Moreover, when assessing the impact of waiting time on patient satisfaction, Sokhela and co-workers (2013) reported that there is a perceived notion by patients that a long waiting time is associated with dissatisfaction with the quality of service than a shorter waiting time; and that communication about treatment is also important aspect that informs the perceptions of patients on the quality of care.

Although several studies have been conducted on this topic, no data were reported about the situation at Mamelodi Hospital. Because patient satisfaction assessment provide critical information needed to gauge the performance of a public facility and identify areas for improvement (Hansen et al, 2008), this study was conducted to assess the level of patients' satisfaction with the quality of inpatient and outpatient services delivered at Mamelodi Hospital.

## ***Methods and materials***

### ***Setting of the study***

The study was conducted at the Mamelodi Hospital which is a district hospital, situated in Pretoria, Gauteng Province, South Africa. It is responsible for the needs of the populations living in the north-eastern residential township Mamelodi that is part of the City of Tshwane, South Africa. It offers district level services. The facility was further chosen because the area is located in a highly populated area which considered as a metropolitan area that has residents of various social status and ethnic diversity.

### ***Study design***

This was a cross-sectional survey of patients attending this facility during the study period. This design was chosen for its simplicity and it is appropriate for the objectives of the study whereby the views of many people need to be collected on a short period of time (The Johns Hopkins and the International Federation of Red Cross and Red Crescent Societies Public Health Guide for Emergencies, 2012).

### *Study population*

The study population comprised adult men and women aged at least 18 years or older that made use of services in the Mamelodi Hospital during the period from 1<sup>st</sup> June to 31<sup>st</sup> July 2014. During the enrollment into the study, patients younger than 18 years, illiterate and the people accompanying patients were excluded from the study as well as patients unable or unwilling to talk or participate.

### *Sample size and sampling processes*

In order to determine the appropriate sample size, the district health information system (DHIS) database was used as the starting point. It showed that Mamelodi Hospital has an average headcount of 4,304 patients a month including both in-patients and out-patients. This figure was used to estimate the sample size for a finite population like this one. Based on an expected 61% figure reported in the literature (Bamidele et al., 2011), with a confidence interval set at 0.10, the required sample size has been calculated to be 366 participants (Hulley et al, 2001).

A simple random sampling was performed during the data collection period. A numbered list of patients was constituted. Then computer-generated random numbers were generated and used to approach the patients to be enrolled in the study. Those who met the inclusion criteria and consented to participate, were enrolled into the study. These enrollees were ushered to a pre-arranged room for the filling out of the questionnaire. This questionnaire was adapted from existing ones and was designed and used for this study. It is noted that the questionnaire had been pre-tested at a near-by clinic among 20 patients and no amendments were made.

Three field workers assisted in the data collection process by issuing the questionnaire in of the three languages, namely, Afrikaans, English and Tswana. One of the interviewers was fluent in English, IsiZulu, IsiXhosa; the second in English and Tswana, and the third, in English and Afrikaans. Only patients who voluntarily agree to participate in the study were enrolled. An informed consent form was included and was filled in and signed by the enrollees after they received explicit information about the study.

### *Data analysis*

All data was be entered into a Microsoft Excel spreadsheet and imported into STATA software (version 10) for analysis. The data capturing process was double-checked by having the electronic records checked manually against the raw data on the questionnaires. A final dataset was produced and used for the analysis. Descriptive statistics were used. Data about costs were converted in American dollars to make it easier for the international audience.

### *Ethics approval*

This study was approved by the Medunsa Research Ethics Committee (MREC) and permission to proceed with the study was obtained from the Senior Clinical Executive of the Mamelodi Hospital.

## *Results*

### *Socio-demographic characteristics of the participants*

In total, 366 people answered the questions about outpatient services; among them, 135 answered questions pertaining to inpatient care services. The mean age of the participants was 35.59 ( $\pm 12.15$ ) years. The minimum age of respondents was 18 years and the maximum age 75 years. The majority of the participants fell within the 31-45 age category (41.53%). The overwhelming majority of the respondents (97.54%) were Black African; 62.3% were females as shown in Table 1.

**Table 1: Distribution of the socio-demographics characteristics of the participants**

<b>Characteristics</b>	<b>Frequency</b>	<b>Percent</b>
<b>Age (years)</b>		
<20	18	4.92
>20	348	95.08
<b>Total</b>	<b>366</b>	<b>100</b>
<b>Gender</b>		
Female	228	62.3
Male	138	37.7
<b>Total</b>	<b>366</b>	<b>100</b>
<b>Race</b>		
Black African	357	97.54
Other	9	2.46
<b>Total</b>	<b>366</b>	<b>100</b>
<b>Religion</b>		
Christian	276	77.03
Non-Christian	82	22.97
<b>Total</b>	<b>357</b>	<b>100</b>
<b>Employment status</b>		
Employed	165	45.21
Unemployed	200	54.79
<b>Total</b>	<b>365</b>	<b>100</b>
<b>Marital status</b>		
Married	144	39.34
Single	222	60.65
<b>Total</b>	<b>366</b>	<b>100</b>
<b>Level education</b>		
High School	248	67.95
Lower level	117	32.05
<b>Total</b>	<b>365</b>	<b>100.00</b>

It is noted that majority of respondents identified themselves as Christian, single, unemployed and having a high school level of education. None of them reported having a tertiary level of education.

*Aspects of outpatient care assessed*

As shown in the following Table, respondents were requested to respond to the statements and indicate their level of agreement with each statement.

**Table 2: Aspects of outpatient care under the control of the hospital**

Statements about outpatient care	Frequency	Percent
<b><i>Infrastructural aspects</i></b>		
<b>The hospital building is in good condition</b>		
Strongly disagree	0	0.00
Disagree	5	1.40
Neutral	12	3.35
Agree	146	<b>40.78</b>
Strongly agree	195	<b>54.47</b>
Total	358	100.00
<b>The hospital is clean</b>		
Strongly disagree	4	1.11
Disagree	15	4.16
Neutral	11	3.05
Agree	145	<b>40.16</b>
Strongly agree	186	<b>51.52</b>
Total	361	100.00
<b>There was a bench for me to sit on while I waited</b>		
Strongly disagree	8	2.20
Disagree	34	9.37
Neutral	33	9.09
Agree	221	<b>60.88</b>
Strongly agree	67	<b>18.46</b>
Total	363	100.00
<b>The toilets are dirty</b>		
Strongly disagree	27	7.47
Disagree	95	26.32
Neutral	41	11.36
Agree	81	<b>22.44</b>
Strongly agree	117	<b>32.41</b>
Total	361	100.00
<b><i>Operational aspects</i></b>		
<b>The out-patient has convenient hours of opening</b>		

Strongly disagree	18	5.06
Disagree	49	13.76
Neutral	91	25.56
Agree	170	<b>47.75</b>
Strongly agree	28	<b>7.87</b>
Total	356	100.00
<b>I had to wait a long time to get my folder</b>		
Strongly disagree	16	4.44
Disagree	103	28.61
Neutral	45	12.50
Agree	150	<b>41.67</b>
Strongly agree	46	<b>12.78</b>
Total	360	100.00
<b>My privacy was respected by all the staff</b>		
Strongly disagree	4	1.14
Disagree	10	2.84
Neutral	156	44.32
Agree	101	<b>28.69</b>
Strongly agree	81	<b>23.01</b>
Total	352	100.00
<b>If I received medicines/ pills I did not have to wait long for them</b>		
Strongly disagree	14	3.92
Disagree	68	19.05
Neutral	52	14.57
Agree	190	<b>53.22</b>
Strongly agree	33	<b>9.24</b>
Total	357	100.00
<b>I was pleased with the way I was treated at the hospital</b>		
Strongly disagree	10	2.79
Disagree	24	6.70
Neutral	27	7.54
Agree	161	<b>44.98</b>
Strongly agree	136	<b>37.99</b>
Total	358	100.00
<b>Staff members' performance</b>		
<b>The person who gave me my folder was helpful</b>		
Strongly disagree	11	3.06
Disagree	20	5.57
Neutral	28	7.80



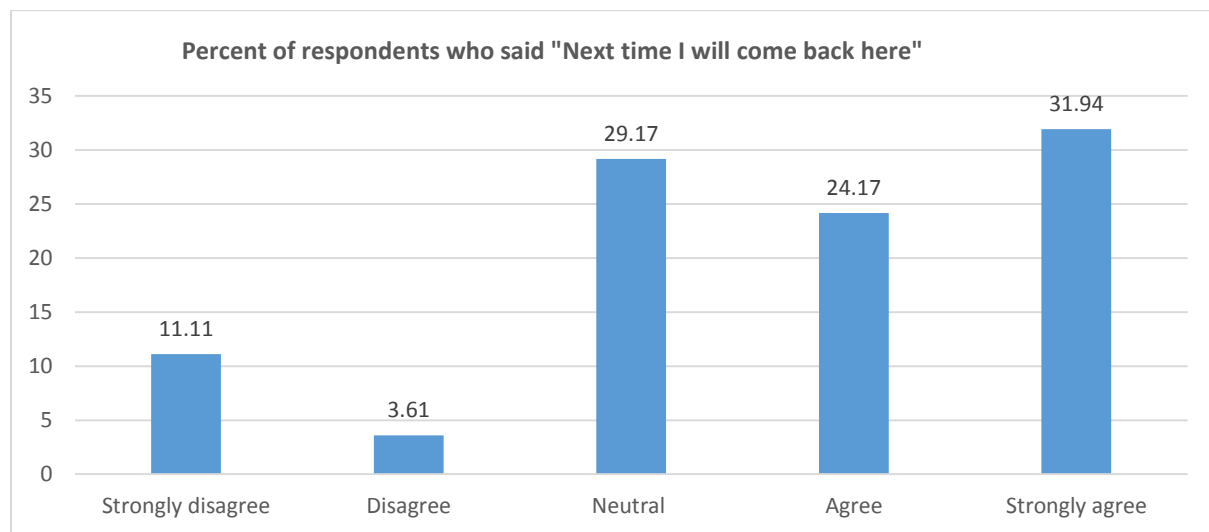
Agree	229	<b>63.79</b>
Strongly agree	71	<b>19.78</b>
Total	359	100.00
<b>The nurse who treated me listened to my problems</b>		
Strongly disagree	6	1.68
Disagree	15	4.20
Neutral	32	8.96
Agree	193	<b>54.07</b>
Strongly agree	111	<b>31.09</b>
Total	357	100.00
<b>The doctor who treated me was polite</b>		
Strongly disagree	2	0.56
Disagree	4	1.11
Neutral	33	9.17
Agree	113	<b>31.39</b>
Strongly agree	208	<b>57.78</b>
Total	360	100.01
<b>The doctor explained to me what was wrong with me</b>		
Strongly disagree	5	1.42
Disagree	15	4.26
Neutral	32	9.09
Agree	164	<b>46.59</b>
Strongly agree	136	<b>38.64</b>
Total	352	100.00

It is encouraging to note that 7 of 13 outpatient aspects assessed as shown in Table 2, that are under direct control of the hospital management, were positively rated as good by over 80% of respondents. These aspects were about the condition of the hospital building, cleanliness, availability of benches to sit on, how the patients were treated throughout the hospital, particularly by the clerks, nurses and doctors. It is also noteworthy that over 50% of respondents rated operational aspects as good, namely, opening hours, privacy, and waiting time to be attended to. With regard to aspects not under the control of the hospital management team, Table 3 summarizes the findings.

**Table 3: Aspects of outpatient care not under the control of the hospital**

Statements about outpatient care	Frequency	Percent
<b>1.It takes less than 30 minutes to get to the hospital</b>		
Strongly disagree	30	8.26
Disagree	84	23.14
Neutral	12	3.31
Agree	144	<b>39.67</b>
Strongly agree	93	<b>25.62</b>
Total	363	100.00
<b>2.It costs me more than R20 to get to the hospital</b>		
Strongly disagree	12	3.31
Disagree	181	49.86
Neutral	9	2.48
Agree	104	<b>28.65</b>
Strongly agree	57	<b>15.70</b>
Total	363	100.00

Of the two aspects assessed, 65% of respondents stated that it took them less than 30 minutes to get to the hospital; and 52% reported that it did not cost them more than 2 American dollars for transport to the hospital. Upon reflection, respondents were asked whether they would come back to the same facility for their health care needs.



**Figure 1: Respondents answers on the possibility of coming back (n=360)**

Overall, 56% of respondents stated that they would come back to the hospital for their health care needs; whilst about a third of respondents (29.17%) were neutral on this assessment.

*Aspects of inpatient care assessed*

**Table 4: Aspects of inpatient care assessed**

<b>Statements about in-patient care</b>	<b>Frequency</b>	<b>Percent</b>
<b>The ward was clean</b>		
Strongly disagree	4	2.96
Disagree	4	2.96
Neutral	4	2.96
Agree	44	<b>32.59</b>
Strongly agree	79	<b>58.52</b>
Total	135	100.00
<b>The beddings were clean</b>		
Strongly disagree	4	2.96
Disagree	4	2.96
Neutral	9	6.67
Agree	37	<b>27.41</b>
Strongly agree	81	<b>60.00</b>
Total	135	100.00
<b>The meals were good</b>		
Strongly disagree	6	4.48
Disagree	6	5.97
Neutral	34	25.37
Agree	44	<b>32.84</b>
Strongly agree	42	<b>31.34</b>
Total	132	100.00
<b>Allowed visiting hours were long enough</b>		
Strongly disagree	3	2.59
Disagree	8	6.90
Neutral	12	10.34
Agree	65	<b>56.03</b>
Strongly agree	28	<b>24.14</b>
Total	116	100.00
<b>Staff members answered all my questions about my illness</b>		
Strongly disagree	11	8.21
Disagree	4	2.99
Neutral	14	10.45

Agree	79	<b>58.96</b>
Strongly agree	26	<b>19.40</b>
Total	134	100.01
<b>I was very bored in the hospital</b>		
Strongly disagree	8	5.97
Disagree	25	18.66
Neutral	13	9.70
Agree	40	<b>29.85</b>
Strongly agree	48	<b>35.82</b>
Total	134	100.00
<b>When I needed help at night, there was always someone to help me</b>		
Strongly disagree	10	7.63
Disagree	7	5.34
Neutral	15	11.45
Agree	69	<b>52.67</b>
Strongly agree	30	<b>22.91</b>
Total	131	100.00
<b>I felt safe at night in the hospital as they were enough lights</b>		
Strongly disagree	9	6.82
Disagree	3	2.27
Neutral	9	6.82
Agree	78	<b>59.09</b>
Strongly agree	33	<b>25.00</b>
Total	132	100.00
<b>The hospital ablutions facilities were clean</b>		
Strongly disagree	3	2.34
Disagree	2	1.56
Neutral	12	9.38
Agree	95	<b>74.22</b>
Strongly agree	16	<b>12.50</b>
Total	128	100.00
<b>I was advised about my future health care needs</b>		
Strongly disagree	16	12.21
Disagree	35	26.72
Neutral	9	6.87
Agree	53	<b>40.46</b>
Strongly agree	18	<b>13.74</b>
Total	131	100.00
<b>If my friends are sick I will tell them to come to this hospital</b>		
Strongly disagree	34	25.76
Disagree	8	6.06
Neutral	15	11.36

Agree	41	<b>31.06</b>
Strongly agree	34	<b>25.76</b>
Total	132	100.00

Overall, over 50% of respondents surveyed were satisfied with all the inpatient aspects of care assessed. In particular, over 80% of respondents were happy with the cleanliness of the ward, bedding and ablutions facilities as well as feeling safe at night. However, one aspect on which about a quarter of patients was neither satisfied nor dissatisfied was the quality of meals. Similarly, about 32% and 39% of patients stated respectively that they would not recommend their friends to come to the hospital and that they disagreed with the statement that they ‘were advised about their future health care needs’. Upon reflection, 56% of respondents would recommend this hospital to their friends.

*Overall Satisfaction level with regard to inpatient and outpatient aspects of care*

**Table 5: Overall satisfaction with outpatient aspects**

Level of satisfaction	Outpatient		Inpatient	
	Frequency	Percent	Frequency	Percent
Very dissatisfied	9	2.80	6	5.00
Dissatisfied	15	4.67	11	9.17
Neutral	101	31.46	39	32.50
Satisfied	162	<b>50.47</b>	51	<b>42.50</b>
Very satisfied	34	<b>10.59</b>	13	<b>10.83</b>
Total	321	100.00	120	100.00

Overall, 61% of respondents were satisfied with the quality of outpatient aspects or services they received. However, 31.5% of respondents were neither satisfied nor dissatisfied; while less than 8% of patients were actually dissatisfied. While for inpatient aspects, overall, 53.3% of them were satisfied with the inpatient aspects of care they received. However, 32.5% of patients were neither satisfied nor dissatisfied; while less than 14.2% of patients were actually dissatisfied.

## ***Discussion***

The sample consisted of adults, mostly Black female patients. The youngest person interviewed was 18 years old, while the oldest was 75 years old. The majority of participants professed Christianity as their religion (77.03%) and had achieved a high school level of education (67.95%) and were single (59.29%) and unemployed (54.79%). This distribution mirrors the utilization of health services in South Africa as well as the socio-demographic profile of patients at public health facilities in South Africa (Wouters et al., 2008; Nteta et al., 2010).

This study reports that, overall 61% of respondents were satisfied with the quality of outpatient aspects or services they received versus 53.3% who were satisfied with the inpatient aspects of care they received. This finding suggests that patients do not rate outpatient and inpatient aspects of care in the same manner. In fact, while less than 8% of outpatients were actually dissatisfied, the corresponding figure for inpatients was about 14.2%. However, a consistent finding is that over 80% of respondents were satisfied with the cleanliness, safety at night, and caring attitude by staff members. This finding implies that the institutional managers ought to ensure that these aspects are maintained as they are the most visible aspects and easily observable by patients.

Indeed, the whole infrastructural aspect of the hospital seems to have been appraised positively by patients. This finding is in contrast with findings of the 2012 national audit whereby patients' safety and security and caring attitudes by staff members were scored satisfactory by just about a third of participants (Visser et al, 2013). Furthermore, the findings of this study do not concur and in fact, show an improvement in comparison to studies reported previously in South Africa and elsewhere, notably by Mashego and Pelsler (2005); and by Couper et al. (2007), Nteta and co-workers (2010), Otani and colleagues (2011) as well as Punnakitikashem et al. (2012) who highlighted the fact that patients were more dissatisfied with issues of waiting time, attitude of staff members and cleanliness and availability of medicines.

Although stratified analysis was not conducted to check for difference in the level of satisfaction based on socio-demographic characteristics, a study of Phaswana-Mafuya et al. (2011) showed that gender differences between male and women for patient satisfaction were reported for all variables of quality assessed. Furthermore, Quintana et al. (2006) reported that the perceptions of quality of service by patients varied based on their socio-economic status. In particular, patients' ratings of service delivery were influenced by gender and educational status as well as their race

(Myburgh et al, 2005). Similarly, Damilola (2012) reported that women tend to have higher satisfaction level for quality of service than men.

It is encouraging that overall, patients' perceptions with regard to the quality of meals, beddings provided by the hospital and visiting hours' arrangements, were all positively assessed by the respondents in this study. Other studies have reported that patients form perceptions based on the quality of care received and thus perceptions were indispensable based on the assessment of the healthcare received from the health system (Hansen et al, 2008). This study's finding concur with other similar studies that reported higher levels of satisfaction (Tran and Nguyen, 2012; Human Sciences Research Council, 2012; Tateke et al., 2012; Lumadi and Buch, 2011).

Aspects requiring attention include areas where less than 80% of respondents were satisfied. These are operational aspects such as opening hours, privacy, and waiting times for outpatients; and the being advised about their future health care needs for inpatients. This latter finding relates to therapeutic communication. A study by Bamidele et al. (2011) showed that communication especially from the staff members added to good perception of quality and patient satisfaction. Similarly, Kumbani et al. (2012) reported that patients were dissatisfied with the access to certain types of information. This included information regarding their treatment, care and discharge and communication of available services. It should be noted that most health care professionals are in need for in-service training about therapeutic communication as that they can improve on what and how they should engage the patients in establishing their needs, desires and expectations.

It is disappointing that less than 60% of patients would either come back or recommend the study site to their friends. This finding is in contrast with reports by other investigators such as Emelumadu and Ndulue (2012) who reported that patients who are satisfied with the positive behavior of the health staff and the quality of care received, agree further that they will make use of the facility again.

The above findings should be taken into consideration noting the following limitations: that this was a cross-sectional study; hence the findings reflect the situation at the time of the study and may not be a permanent feature at the study side. As with most surveys, the social desirability bias may have occurred as some patients may have preferred to voice out what they thought was what they needed to say rather than their real assessment and perceptions of the quality of service

they received at the facility. Moreover, language and communication issues may have compromised the understanding of patients.

In conclusion, the findings for the study suggested that the majority of patients were satisfied with the inpatient and outpatient aspects of care provided at the hospital where this study was conducted. Institutional managers and staff members should be encouraged to maintain or improve the areas on which they are doing well and take corrective actions to address the shortcomings noted. Further studies should be considered at the study site to check whether improvements have been made.

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