

Consumers' Satisfaction with Health Care provided in thalassemia center

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Abstract: Customer's fulfillment is high esteem and it is helpful to comprehend the need of customer. By comprehension the significance of fulfillment and deciding its current level, social insurance administrations can be made applicable to the prerequisite of buyers. Nursing consideration is one of the significant social insurance benefits especially in thalassemia focuses. On this line, evaluating the fulfillment of patients with nursing consideration is key keeping in mind the end goal to distinguish the range of disappointment

Objectives: to assess the consumers' satisfaction with health care provided in thalassemia center at pediatric hospital in Kerbala.

Methodology: A descriptive study was conducted during the period from 1st March 2014 to 20th June, 2014 on a sample of 100 consumers of health services in thalassemia center. A questionnaire was used in the study, which contain information about the demographic data of the consumers (8 items) and selected questions about their satisfaction level about health care provided (16 items). Data were analyzed through a descriptive and inferential statistics using the SPSS-PC, version 19.

Results: it was found that the majority of consumers were high satisfied regarding nursing care provided in the thalassemia center and the start of treatment after diagnosis and, blood transfusion required per month have positive effect on level of consumers' satisfaction.

Recommendations: the study recommended nursing curriculum should give attention for developing the communication skills for the nurses and, thalassemia centers should be expanded and provided by well-trained staffs. In addition to carry out additional studies on a larger sample in thalassemia centers in other Iraqi governorates.

Key words: Health Services, Satisfaction, Consumers, Thalassemia

I. Introduction

Consumer's satisfaction is high value and it is useful to understand the need of consumer. By understanding the importance of satisfaction and determining its existing level, health care services can be made pertinent to the requirement of consumers. A review of relevant literature supports that assessment of level of consumer satisfaction is the tool to determine the level of health care delivery, analyze the existing situation and workout strategy to improve it. This is supported and emphasized by Fitzpatrick (1991) who stated that patient satisfaction provides potentially a direct indicator of system performance and is health care provision ⁽¹⁾. Abdul Karim, et al, 1996 stated that studies related to the consumer satisfaction are essential, but this topic has always been unnoticed by the service providers ⁽²⁾. Therefore, it is important that regular internal audit should be conducted to assess the consumer satisfaction.

Consumer satisfaction with health care services is important for several reasons, satisfied consumer are more likely to maintain a consistent relationship with a specific provider. By identifying sources of consumer's dissatisfaction an organization can address system weaknesses. First improving its risk management, satisfied consumer is more likely to follow specific medical regimens and treatment plans. Consumer satisfaction measurement adds essential information on system performance thus contributing to the organizations total quality management ⁽³⁾.

Patient satisfaction with nursing care is operationally defined in literature as the degree of congruence between patients' expectations of ideal care and the actual care provided during the course of interaction with nurses. However, few studies critically examine domains of satisfaction with nursing care ⁽⁴⁾. Uitterhove, et al, 2009; and Laschinger, et al, 2005 identified five themes as characteristics of good nursing care to fulfill patient's satisfaction, including meeting patient needs, treating patient pleasantly, caring, providing prompt care and being competent ^(5 and 6).

The role of the nurse is critical to the management of chronic disorders such as thalassemia or sickle cell disease (SCD). The nurse is the first member of a health care team that a patient visiting a haemoglobinopathy day care center will meet, talk to and confide in. The empathy and sensitivity of a nurse is an essential element in the care of patients with chronic diseases. Patients spend many hours on a ward or in a day care center, waiting for blood units to be delivered from the blood bank, undergoing a transfusion, having

venipuncture-times when they may have something to discuss, or perhaps just want to chat. The nurse is the one to listen and give feedback⁽⁷⁾.

Nursing care is one of the major health care services particularly in thalassemia centers. On this line, assessing the satisfaction of patients with nursing care is key in order to identify the area of dissatisfaction and at the same time improve the nursing services in thalassemia center, for giving effective care. Therefore this study was undertaken to evaluate the performance of the services in the consumer's perspective, and to identify the satisfaction of the consumers and suggest measures for improvement of quality care⁽⁸⁾. In the world, there are an estimated 60-80 million people carrying the beta thalassemia trait. The actual number of those thalassemia major is unknown due to the prevalence of thalassemia in less developed countries. Thalassemia is most prevalent in the Mediterranean basin, the Middle East, Eastern and Southern Asia, the South Pacific, and South China, where reported carrier rates range from 2% to 25%.⁽⁹⁾ In Iraq, thalassemia is seen in almost all parts of the country. In Kerbela, thalassemia center serves about 501 cases regular register patients, on a daily attendance to follow-up and have blood transfusion of about (20-60) patients per/day. However, literature review has revealed lack of studies that address consumers' satisfaction with health care provided in thalassemia center. The aim of the study was to measure consumers' satisfaction regarding health care provided in thalassemia center.

II. Methodology

A descriptive study was conducted to assess the consumers' satisfaction with health care provided in thalassemia center at pediatric hospital in Kerbela during the period from 1st March 2014 till the end of 20th May, 2014 on a sample of 100 consumers over 17 years of age. Eligible subjects were face interviewed by researchers in collaboration with nurse manager of the thalassemia center. The tool of present study was adapted from a Copper View Medical Center (CVMC)(2001), and study by Aliet al. (2011)^(10 and 8). Several items of this questionnaire were modified and developed to increase the validity of this instrument and to be more appropriate for achieving the aims of the present study.

The developed tool contained two parts: Demographic data of respondents which include consumers' gender, age, educational level, family history of thalassemia, age of diagnosis, start of treatment, blood transfusion required per month and use medication during treatment and five-point Likert scale questionnaire consisted of 16 positively worded statements were grouped under five major satisfaction domains of services provided; Arrival services, nurses services, physicians services, laboratory services, and Radiology (X-ray) services.

The items concerning consumers' satisfaction were measured on a five levels Likert scale; Very poor, poor, fair, good, and very good and rated as 1, 2, 3, 4 and 5, respectively with a cut-off point=3. Cut-off-point was calculated as $1+2+3+4+5/5=3$. $RS = \text{cut-off-point}/\text{no. of scoring} * 100$, $3/5 * 100 = 60$ which is considered low limit of acceptance. Assessment of consumers' satisfaction was based on: Mean score for items equal to 3 or more is considered as pass (3 to 3.6 considered as fair, 3.7 to 4.3 considered as good and, 4.4 to 5 considered as very good). Mean score for consumers' satisfaction items below 3 is considered as failure (poor satisfaction).

Data analysis

Data analysis included descriptive and inferential statistics using the Statistical Package for the Social Sciences (SPSS-PC, version 19).

III. Results:

Table-1: Demographic characteristics, diagnosis and treatment related variables. (N.100)

| N. | Variables | Frequency | Percent (%) |
|----|--------------------------------------|-----------|-------------|
| | Gender | | |
| | Female | 52 | 52 |
| | Male | 48 | 48 |
| | Age (in years) | | |
| | 18-22 | 9 | 9 |
| | 23-27 | 56 | 56 |
| | 28 - 32 | 30 | 30 |
| | >32 | 5 | 5 |
| | Education | | |
| | Illiterate | 4 | 4 |
| | Read and write | 20 | 20 |
| | Primary | 34 | 34 |
| | Intermediate and secondary | 35 | 35 |
| | Institute and college | 7 | 7 |
| | Family history of thalassemia | | |
| | Present in siblings | 46 | 46 |
| | Other family members | 20 | 20 |
| | None | 34 | 34 |

| | | | |
|--|---|----|----|
| | Age of Diagnosis | | |
| | During pregnancy | 0 | 0 |
| | < 4 months after birth | 23 | 23 |
| | 4 – 8 months | 29 | 29 |
| | 9 months – 1 year | 10 | 10 |
| | After a year | 38 | 38 |
| | Start of treatment | | |
| | Within one week of diagnosis | 67 | 67 |
| | Within one month | 10 | 10 |
| | After one month | 23 | 23 |
| | Blood transfusion required per month | | |
| | Once | 54 | 54 |
| | Twice | 39 | 39 |
| | Thrice | 5 | 5 |
| | > three times | 2 | 2 |
| | On regular medication | | |
| | Yes | 93 | 93 |
| | No | 7 | 7 |

Table 1. Indicates that the distribution of the sample, as regards to their sociodemographic characteristics. This table shows 52 % of the total subjects were females while 48 % were male. The majority (56%) of consumers were in the 23 to 27 years age group. Slightly more than third (35%) of the consumers were intermediate and secondary and the 34% had primary school. Family history of thalassemia was positive in (46%) of the siblings, with 34% were none having family history of thalassemia. Thalassemia was diagnosed in (38%) after year of birth; while (29%) within 4-8 months after birth. 38% of the were age of diagnosis after a year. Treatment was immediately started (within one week of diagnosis) in 67% of children. However, 54% of children required blood transfusion once each month with 93% reported to use medication during treatment.

Table 2. Frequency and percentage distribution according to consumers' satisfaction with health services (N.100)

| Items | Very poor | | Poor | | Fair | | Good | | Very good | | M.s | Asses smen t |
|--|-----------|----|------|----|------|----|------|----|-----------|----|-----|--------------|
| | N. | P. | N. | P. | N. | P. | N. | P. | N. | P. | | |
| Arrival Services | | | | | | | | | | | | |
| Courtesy and professionalism of reception | 0 | 0 | 1 | 1 | 1 | 1 | 23 | 23 | 75 | 75 | 4.7 | Pass |
| Privacy you felt when asked about your Personal /insurance information | 1 | 1 | 0 | 0 | 4 | 4 | 27 | 27 | 68 | 68 | 4.6 | Pass |
| Comfort of the waiting area | 0 | 0 | 2 | 2 | 4 | 4 | 28 | 28 | 66 | 66 | 4.5 | Pass |
| Waiting time before you were taken to the treatment area | 0 | 0 | 0 | 0 | 2 | 2 | 37 | 37 | 61 | 61 | 4.5 | Pass |
| Waiting time in the treatment area before you were seen by a healthcare provider | 0 | 0 | 0 | 0 | 1 | 1 | 29 | 29 | 70 | 70 | 4.6 | Pass |
| Nurse's Services | | | | | | | | | | | | |
| Courtesy of the nurses | 0 | 0 | 0 | 0 | 11 | 11 | 26 | 26 | 63 | 63 | 4.5 | Pass |
| Degree to which the nurses took the time to listen to you | 0 | 0 | 1 | 1 | 9 | 9 | 23 | 23 | 67 | 67 | 4.5 | Pass |
| Nurses' attention to your needs | 1 | 1 | 0 | 0 | 5 | 5 | 31 | 31 | 63 | 63 | 4.5 | Pass |
| Nurses' skill when administering injections or performing other procedures | 1 | 1 | 1 | 1 | 3 | 3 | 35 | 35 | 60 | 60 | 4.5 | Pass |
| Physician's Services | | | | | | | | | | | | |
| Courtesy of provider | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 26 | 74 | 74 | 4.6 | Pass |
| Degree to which the provider took the time to listen to you | 0 | 0 | 0 | 0 | 8 | 8 | 19 | 19 | 73 | 73 | 4.6 | Pass |
| Provider's concern to keep you informed about your condition and treatment | 0 | 0 | 0 | 0 | 8 | 8 | 20 | 20 | 72 | 72 | 4.6 | Pass |
| Laboratory Services | | | | | | | | | | | | |
| Waiting time for lab | 0 | 0 | 0 | 0 | 7 | 7 | 23 | 23 | 70 | 70 | 4.6 | Pass |

| | | | | | | | | | | | | |
|--|----|----|----|----|----|----|----|----|----|----|-----|---------|
| Courtesy of the person who took your blood | 10 | 10 | 2 | 2 | 24 | 24 | 34 | 34 | 30 | 30 | 3.8 | pass |
| Radiology (X-ray) Services | | | | | | | | | | | | |
| Waiting time for radiology test | 0 | 0 | 0 | 0 | 14 | 14 | 41 | 41 | 45 | 45 | 4.3 | Pass |
| Courtesy of the radiology staff | 1 | 1 | 13 | 13 | 80 | 80 | 2 | 2 | 4 | 4 | 2.9 | Failure |

M.S: Mean of Score; N: Number; P: Percent

This table shows that consumer's satisfaction regarding assessment of provided services has lower mean of scores on item 16.

Table.3. Summary statistics for consumers' satisfaction regarding assessment of health services

| No | Items | N. | M.s | Assessment |
|----|---|-----|-----|------------|
| 1 | Satisfaction about service provided by reception unite | 100 | 4.5 | Pass |
| 2 | Satisfaction about service provided by the nurses | 100 | 4.5 | Pass |
| 3 | Satisfaction about service provided by the physicians | 100 | 4.6 | Pass |
| 4 | Satisfaction about service provided Laboratory unite | 100 | 4.2 | Pass |
| 5 | Satisfaction about service provided by the Radiology (X-ray) unite | 100 | 3.6 | Pass |
| 6 | Overall satisfaction about service provided by the thalassemia center | 100 | 4.2 | Pass |

N.: Number; M.S: Mean of Score

This table reveals that consumer's satisfaction regarding assessment of health services has lower mean of scores on item 5.

Table. 4. Distribution of the observed frequencies, and percentages, of some related variables to the consumers' satisfaction regarding health services with significant comparison (N.100)

| N. | Variables | Frequency | Percent (%) | P-value |
|----|---|-----------|-------------|--------------------|
| | Gender | | | $\chi^2 = 12.694$ |
| | Female | 52 | 52 | df=1 |
| | Male | 48 | 48 | P=0.468 |
| | Age (in years) | | | $\chi^2 = 136.112$ |
| | 18-22 | 9 | 9 | df=3 |
| | 23 – 27 | 56 | 56 | P=0.125 |
| | 28-32 | 30 | 30 | |
| | >32 | 5 | 5 | |
| | Education | | | $\chi^2 = 106.742$ |
| | Illiterate | 4 | 4 | df=4 |
| | Read and write | 20 | 20 | P=0.349 |
| | Primary | 34 | 34 | |
| | Intermediate and secondary | 35 | 35 | |
| | Inst itute and college | 7 | 7 | |
| | Family history of thalassemia | | | $\chi^2 = 90.509$ |
| | Present in siblings | 46 | 46 | df=2 |
| | Other family members | 20 | 20 | P=0.150 |
| | None | 34 | 34 | |
| | Age of Diagnosis | | | $\chi^2 = 9.302$ |
| | During pregnancy | 0 | 0 | df=3 |
| | < 4 months after birth | 23 | 23 | P=0.944 |
| | 4 – 8 months | 29 | 29 | |
| | 9 months – 1 year | 10 | 10 | |
| | After a year | 38 | 38 | |
| | Start of treatment | | | $\chi^2 = 225.237$ |
| | Within one week of diagnosis | 67 | 67 | df=2 |
| | Within one month | 10 | 10 | P=0.008 |
| | After one month | 23 | 23 | |
| | Blood transfusion required per month | | | $\chi^2 = 190.319$ |
| | Once | 54 | 54 | df=3 |
| | Twice | 39 | 39 | P=0.043 |
| | Thrice | 5 | 5 | |
| | > three times | 2 | 2 | |
| | On regular medication | | | $\chi^2 = 12.305$ |
| | Yes | 93 | 93 | df=1 |
| | No | 7 | 7 | P=0.475 |

χ^2 = Chi-square, d.f.= degree of freedom. Significant at $P < 0.05$ to > 0.01 . Non-Significant. at $P > 0.05$.

This table shows that there is a significant association between consumers' satisfaction and start of treatment after diagnosis and, blood transfusion required per month, and no significant association between consumers' satisfaction and their other demographic characteristics that presented in this table at $P \leq 0.05$.

IV. Discussion

The present study focused on assessing consumer's experience and satisfaction with health care provided in thalassemia center. The findings of the study were discussed as follows:

The present study showed that more than half of the consumers (52%) were females and (48%) were males (Table 1). The current result agrees with the study which was conducted by Shinde, and Kapurkar (2014) who found that 61% of consumers were females⁽¹¹⁾. The study revealed that the majority (56%) of the consumers were of age group (23-27) years old (Table 1). This result agrees with the study of Shinde, and Kapurkar (2014) who found that 40.6% of consumers were of age group (25-29) years old⁽¹¹⁾.

Other results obtained from this table showed that 35% of the consumers have Intermediate and secondary. This result contracted with Radha (2013) which indicated that the 27.9% of subjects had Intermediate and secondary⁽¹²⁾. Also, the results obtained from this table indicated that the family history of thalassaemia was positive in 46% of the siblings, with 20% among other family members. This result agrees with study conducted by Ammad et al. (2011) which revealed that the family history of thalassemia was positive in 48.4% of the siblings, with 11.8% among other family members⁽¹³⁾.

Concerning the age of diagnosis the study revealed that thalassemia was diagnosed in 38% after a year; while about 29% were diagnosed for the disease during 4 – 8 months after birth (Table 1). This result agreed with study conducted by Ammad et al. (2011) which revealed that thalassemia was diagnosed in 65% within 8 months after birth; while only three children were fortunate to be diagnosed for the disease during pregnancy⁽¹³⁾. The current study revealed also that the treatment was immediately started within one week of diagnosis in 67% of patients (Table 1). This result agreed with study conducted by Ammad et al. (2011) which revealed that the treatment was immediately started (within a week) in 77% of patients⁽¹³⁾. Regarding blood transfusion required per month, the result of this study indicates that the slightly more than half (54%) of patients required blood transfusion once each month with closely 93% reported to use medication during treatment (Table 1). This result disagrees with study conducted by Ammad et al. (2011) which revealed that the 65% of patients required blood transfusion twice each month with nearly 2/3 reported to use medication during treatment⁽¹³⁾.

Regarding consumer satisfaction about services provided, the results of the present study in table (2) indicate that the 81.6% of consumers surveyed said they were satisfied about all services provided.

In current study there was good satisfaction with services was 97% about arrival services, 92% about nurses services, 94.6% about physicians services, and 78% about laboratory services. Whereas, only 46% of consumers surveyed said they were satisfied about radiology (X-ray) services (tables 2 and 3). Patient satisfaction with health care is important for several reasons, satisfied patient are more likely to maintain a consistent relationship with a specific provider. By identifying sources of patient's dissatisfaction an organization can address system weaknesses. Patient satisfaction measurement adds important information on system performance thus contributing to the organizations total quality management⁽³⁾. In the present study the correlation between consumers' satisfaction and start of treatment after diagnosis and, blood transfusion required per month was significant at $p < 0.05$ whereas no significant association between consumers' satisfaction and their gender, age, level of education, family history of thalassemia and age of diagnosis that presented in this table at $P \leq 0.05$.

Shikiar, et al, 1999 stated that no correlations were found between patients' satisfaction and age, gender, or education. Respect for patient's needs and wishes are central to any humane health care system. Providers wishing to meet those needs more effectively have shown growing interest in the use of patient evaluation and reports as a complement to other methods of quality assessment and assurance⁽¹⁴⁾.

V. Conclusions

On the basis of the discussion of results and their interpretations, the present study concluded that:

1. Thalassemia is one of the most common causes of hereditary anemia that should be diagnosed early.
2. The consumers were satisfied regarding health care provided in the thalassemia center
3. The starts of treatment after diagnosis and, blood transfusion required per month have positive effect on level of consumers' satisfaction.

VI. Recommendations

1. Nursing curriculums should give attention for developing the communication skills for the nurses particularly interpersonal skills
2. Thalassemia centers should be expanded and provided by well-trained staffs.

3. Consumers' suggestions for improving the quality of health care provided should be taken into considerations through the use of the findings of this study to improve the quality of health care.
4. Further studies should be conducted concerning consumers' satisfaction with health care provided in other thalassaemia centers.

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