



Determination of Health Service for Beneficiary Satisfaction: A Study of Maysan Child and Maternity Hospital

Saad Bader Abbas ¹, Rihab Al-Bedoui Bin Salem ²

Abstract

Background: Ensuring beneficiary satisfaction with health services is crucial for improving healthcare delivery and positively impacting public health. This study assessed beneficiary satisfaction at Maysan Child and Maternity Hospital in Iraq to identify areas for improvement. **Method:** Utilizing a Triple Likert scale questionnaire, data was collected from 63 beneficiaries between July and November 2023. Statistical analyses were conducted to evaluate satisfaction levels and determine any significant differences based on demographic factors. **Results:** The study revealed that most of the sample were female (82.5%), with the largest age group being 25 years and under (41.3%). Additionally, individuals with a primary school certificate constituted the most prevalent educational group (27%). Emergency services were the most commonly received health service (42.8%). Overall, beneficiary satisfaction with health services was high, with an arithmetic mean of 2.40, exceeding the hypothesized mean of 2. The standard deviation was 0.758, and the coefficient of variation was 0.321. Furthermore, no

statistically significant differences were found in the satisfaction levels based on sex, age, educational achievement, or type of services received ($P > 0.05$). **Conclusion:** These findings underscore the importance of prioritizing beneficiary satisfaction to optimize healthcare delivery and meet evolving healthcare needs.

Keywords: Child and Maternity Hospital, Health services, Quality of healthcare, Patient-centered care

Introduction

This study is considered one of the important studies that shed light on the issue of beneficiary satisfaction, namely inpatients and outpatients, of the health services provided by Maysan Hospital for Child and Maternity in terms of their availability, including doctors, pharmacists, nurses, medicines, medical devices, laboratory analysis, and others, with high quality. The results of this study will be used to improve health services in the hospital above through cooperation with the hospital administration in setting goals that will reach high levels of beneficiary satisfaction. The reader will be introduced to the concepts of quality of health services and beneficiary satisfaction, which will enable him/her to deal with these topics when going to health institutions to request the services he/she needs, such as emergency health services, or to detect and investigate diseases, treat it, and conduct periodic and laboratory examinations.

Health services are defined as all services provided by the health sector in countries with different orientations, such as therapeutic services directed at the individual, preventive services directed at

Significance | Research on health service satisfaction highlights vital insights for improving care, enhancing patient well-being, and optimizing resource utilization for better outcomes.

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society, or even directed at the environment, or collectively. Production of medicines and their types, medical compounds, devices, industrial parts, etc., to enable the health status of citizens, treat them, and protect them from physical diseases of various kinds (Murzuq, 2012), it is also known as a group of actions that are directed to satisfying various human needs related to survival and continuation of life, it's linked to other actions that are present in society, such as educational, economic, social, and similar tasks indirectly, so that it gives the beneficiary the ability to adapt to his environment by providing what supports his abilities, Which may be sensory or psychological, which makes him able to achieve what is required of him in performance (Abd Al-Razzaq, 2011). Health services have a set of goals that derive from the nature of their characteristics and the nature of their great impact on the daily lives of individuals, we can postpone, delay, or even cancel the purchase of a specific commodity, but this cannot happen with the health service, which determines a specific time, as two types of these goals can be observed: goals According to the expectations of the beneficiaries, by which we mean the levels of service that the beneficiaries want to receive, such as having these services close to them and having easy access to them, health services at a high quality and efficient level, preserving patients' secrets and dignity while providing these services to them, and the patient's freedom to choose the specialist doctor (Karim, 2016), goals according to the expectations of their providers, which are the goals that represent the levels of these services that the providers want to reach, the level of benefit that can be achieved can be divided into tangible and direct benefits, meaning we can measure and calculate it, and a direct intangible benefit, in which we notice the difficulty the method of measurement, an example of this is an attempt reducing the feeling of pain experienced by the patient as a clear result of the health services provided, and an indirect tangible benefit that we can calculate, for example increasing production as a clear result of the health services provided to members of the workforce (Al-Demerdash, 2008).

The English nurse Florence Nightingale is considered one of the first to specialize in using the concept of quality in the health field, she worked as a supervisor in a military hospital and provided health care during the Crimean War by adopting some simple performance standards, which resulted in a significant reduction in the number of deaths in the departments of those hospitals (Khosrov, 2008), The quality of health services is defined as the percentage of conformity of the series of service procedures provided to the patient, such as diagnostic and treatment services, to approved scientific medical specifications, which leads to reaching patient satisfaction and achieving the goal of improving his health condition (Saleh, 2019), it is a group of health programs, activities, and procedures aimed at protecting community members, preventing the occurrence of health problems, and

finding solutions and treating them (Abu Al-Nasr, 2008), it is also the method taken by the institution in providing its services that distinguishes it from other institutions that provide similar services, thus creating a personal image for this institution that distinguishes it at various levels (Al-Taweel, et al., 2010), the importance of health service quality can be summarized by the expansion of the growth of this sector, the intensification of competition to easily reach competitive advantages, understanding the needs of beneficiaries, and the recovery of the economic indicator of the quality of beneficiary service (Zadira, 2017).

The concept of beneficiary (patient) satisfaction is a set of positive feelings that are generated by the beneficiaries (patients) regarding the health care services provided to them within the hospital departments until they leave it, taking into account the availability of all requirements for physical and psychological comfort and necessary treatment, and awareness and focus on what the beneficiary (patient) should receive essential health care (Abbas, 2014), It is the impact and positive or negative impact that a beneficiary feels through his purchase of a good or enjoyment of a service, which is arrived at by making comparisons between what we expect of the performance of a particular service and what we perceive of the actual service performance (Touiti & Boudad, 2018). The importance of beneficiary satisfaction is highlighted by the fact that the beneficiary is satisfied with the service provided to him by the institution, the decision to return to the institution again will be quick and the probability of him going to another institution will certainly decrease, if the beneficiary is satisfied with the institution's overall services, the possibility of him talking to others about the institution increases positively, it will be large leading to new beneficiaries coming to the institution (Salmi & Bosta, 2014), beneficiary satisfaction is considered the most important measure of service quality, and it helps the organization provide indicators to determine and evaluate its efficiency and improve it for the better by evaluating the applied policies and eliminating those that could affect its satisfaction, it is considered an important guide for planning organizational resources in a way that ensures serving the beneficiary's desires, ambitions and needs in light of his opinions, which are considered feedback, and knowledge of the level of performance of employees in the organization and the extent of their need for training programs and courses in the future (Youssef & Tishat, 2020).

Measuring the quality of health services in healthcare institutions is a complex process compared to measuring other services, the use of quantitative methods and tools is easily applicable to most services, but measuring the quality of health services is difficult due to their intangible nature and differences from other private services (Al-Ali, 2010). One way to evaluate the quality of health services is by measuring their actual performance, this involves assessing the correlation between the quality of service provided and the

satisfaction of the beneficiaries, as well as their intention to use the service again, to apply this measure, we can ask beneficiaries questions about the level of service performance (Khalifa, et al., 2020). Measuring the quality of healthcare services can be done by evaluating the different stages involved in providing those services, this process involves using a set of indicators that competent authorities and health organizations, such as the World Health Organization have established, these indicators provide standard ratios for various elements, activities, and procedures related to preventive, diagnostic, and therapeutic healthcare services, the results of these evaluations determine whether or not the services provided are of good quality (Mazriq, 2010). Measuring the quality of healthcare in terms of outcomes refers to the final changes in a patient's health status, this is typically evaluated using the general health status index and the disease outcome index (Wafia, 2020).

The beneficiary's satisfaction is a basic and essential indicator of his acceptance of the service in light of his positive or negative expectations (Russell & Taylor 2000), the beneficiary's satisfaction depends on comparing the service's performance with his expectations, if the service's performance is less than expectations, the beneficiary will be dissatisfied, and if the performance matches expectations, the beneficiary will be satisfied, but if performance exceeds expectations the beneficiary will be extremely satisfied or happy (Kotler & Armstrong, 2015) which is the outcome of the evaluation the beneficiary makes of a particular exchange.

Materials And Methods

Study Design

The study is based on the following question: What is the relationship between the beneficiaries' satisfaction level with health services and their demographic characteristics in terms of sex, age, academic achievement, and the type of services they receive in the hospital under study?

Participants

Due to the importance of the categories of women and children in society, and for the study to be highly focused, the Maysan Child and Maternity Hospital in Maysan Governorate was chosen to be the place for conducting the study because it is the only hospital specialized in providing care for these groups. The study included 63 beneficiaries of the health services provided in the aforementioned hospital, they were divided into two categories: The first category included inpatients in hospital departments, women who had cesarean sections, women with high blood pressure during pregnancy, and women accompanying sick children with jaundice, congenital cases, bronchitis, refractory epilepsy, and other diseases. The second category includes women who come to seek health advice for themselves or their children or to request awareness-raising or family-planning services.

Data collection

Research data was collected through interviews conducted by researchers with beneficiaries of health services, as well as the use of a questionnaire that contains a set of questions that investigate the level of satisfaction with these services based on a Triples' Likert scale, for the period from July 1, 2023 to November 1, 2023.

Ethics Approval

The study protocol was approved by the Training and Human Development Center in the Maysan Health Directorate, and written informed consent was obtained from all subjects.

Statistical Analysis

Statistical analysis was performed using Excel, Arithmetic mean, Standard deviation to measure the extent of dispersion of data from the arithmetic mean, Coefficient of variation, and SPSS. Differences between two independent samples were analyzed with the t-test, while differences between three independent samples were analyzed with the ANOVA tests, the significance of differences was determined with a two-tailed P value > 0.05.

Results

Determine the beneficiaries' satisfaction level

The level of beneficiary satisfaction was measured through (11) items, the arithmetic means of the sample's answers to the items were compared based on the value of the standard arithmetic mean of (2) out of (3), the standard deviation to estimate the extent of dispersion in the answers and the coefficient of variation to determine the degree of homogeneity in the sample's answers, as tables No. 2 and No. 3 indicate a general arithmetic mean of a high level for beneficiaries of health services, as it reached (2.40), which is above the standard mean of (2), general standard deviation was (0.758), and the coefficient of variation was (0.321), the results were distributed between the highest mean value achieved by paragraph (10), which is (I feel good about hospital staff to respecting me), which was (2.60) above the standard mean, and the lowest mean value achieved by paragraph (6), which is (In general, I am satisfied with the time consumed to obtain the service) as it reached (2.06) also above the standard mean, which reflects the level of satisfaction with the time consumed to obtain the service, with the least dispersion in the answers achieved by paragraph (9), which is (I am satisfied with the efficiency of the health staff and their skills) Its standard deviation and coefficient of variation were (0.638) and (0.246), respectively, which reflects good use of this method in the hospital studied, the highest dispersion in the answers was regarding paragraph (7), which is (I am satisfied with the proximity of the hospital to my place of residence), where the standard deviation and coefficient of variation were (0.870) and (0.392), respectively.

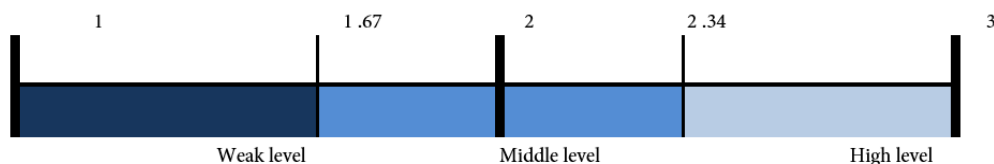


Figure 1. Levels of answers based on the Triples' Likert scale

Table 2. Frequencies and percentages for items on beneficiaries' satisfaction with health services

No.	Items	I don't agree		Neutral		Agree	
		F	%	F	%	F	%
1	In general, I am satisfied with the health services provided in the hospital.	11	17.5	22	34.9	30	47.6
2	I feel safe going to the hospital.	15	23.8	13	20.6	35	55.6
3	I am satisfied with the communication and coordination with hospital staff	5	7.9	18	28.6	40	63.5
4	I am satisfied with the interest of the health staff in my health problem.	12	19.0	18	28.6	33	52.4
5	I am satisfied with the relationship with hospital staff.	8	12.7	20	31.7	35	55.6
6	In general, I am satisfied with the time consumed to obtain the service.	21	33.3	17	27.0	25	39.7
7	I am satisfied with the proximity of the hospital to my place of residence.	18	28.6	13	20.6	32	50.8
8	Feel good about the costs of examination and treatment in the hospital.	14	22.2	15	23.8	34	54.0
9	I am satisfied with the efficiency of the health staff and their skills.	5	7.9	16	25.4	42	66.7
10	I feel good about hospital staff to respecting me.	7	11.1	11	17.5	45	71.4
11	I feel good about the hospital staff to explaining my health condition in an understandable way.	9	14.3	9	14.3	45	71.4

Table 3. Arithmetic mean, standard deviation, and coefficient of beneficiaries' satisfaction with health services.

No.	Items	Coefficient of Variation	Arithmetic Mean	Standard Deviation	Arithmetic Mean Level
1	In general, I am satisfied with the health services provided in the hospital.	0.328	2.30	0.754	Middle
2	I feel safe going to the hospital.	0.362	2.32	0.839	Middle
3	I am satisfied with the communication and coordination with hospital staff.	0.251	2.56	0.642	High
4	I am satisfied with the interest of the hospital staff in my health problem.	0.336	2.33	0.783	Middle
5	I am satisfied with the relationship with hospital staff.	0.293	2.43	0.712	High
6	In general, I am satisfied with the time consumed to obtain the service.	0.417	2.06	0.859	Middle
7	I am satisfied with the proximity of the hospital to my place of residence.	0.392	2.22	0.870	Middle
8	Feel good about the costs of examination and treatment in the hospital.	0.353	2.32	0.820	Middle
9	I am satisfied with the efficiency of the health staff and their skills.	0.246	2.59	0.638	High
10	I feel good about hospital staff to respecting me.	0.263	2.60	0.685	High
11	I feel good about the hospital staff to explaining my health condition in an understandable way.	0.286	2.57	0.734	High
Total satisfaction in general with the health services provided		0.321	2.40	0.758	High

Table 4. Overall satisfaction with sex of study group

Sex	No.	%	Mean	Std. Deviation	Std. Error Mean
Male	11	17.5	2.3388	.45652	.13765
Female	52	82.5	2.4021	.28824	.03997
Total	63	100			

No. = Number of group study, % = Percentages

Table 5. T-test for Equality of Means with sex of study group

	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	3.508	.066	.592	61	.556	-.06325	.10683	-.27688	.15037
Equal variances not assumed				11.741	.667	-.06325	.14333	-.37632	.24981

F = frequencies , t = T. test, sig. = significant, df = degree of freedom

Table 6. Overall satisfaction with (Age, Academic achievement and Type of services) of study group

		No.	%	Mean	Std. Deviation	Sd. Error	95% Confidence Interval for Mean		M-	M+
							Lower Bound	Upper Bound		
Age	Less than 25 years	26	41.3	2.4196	.33037	.06479	2.2861	2.5530	1.73	2.91
	25-29 years	19	30.1	2.4641	.24785	.05686	2.3447	2.5836	1.91	2.82
	30-34 years	8	12.7	2.1023	.42761	.15118	1.7448	2.4598	1.27	2.55
	35-39 years	3	4.7	2.6061	.18924	.10926	2.1360	3.0762	2.45	2.82
	40-44 years	2	3.2	2.3182	.06428	.04545	1.7406	2.8957	2.27	2.36
Age	45 years and above	5	8	2.3273	.22818	.10205	2.0439	2.6106	2.00	2.55
	Total	63	100%	2.3911	.32022	.04034	2.3104	2.4717	1.27	2.91
Academic achievement	No Education	14	22.2	2.5195	.26064	.06966	2.3690	2.6700	2.00	2.82
	Read and Write	7	11.2	2.3247	.30988	.11712	2.0381	2.6113	1.91	2.64
	Elementary	17	27.0	2.3422	.37141	.09008	2.1513	2.5332	1.27	2.82
	High School	13	20.6	2.4336	.28058	.07782	2.2640	2.6031	1.91	2.91
	College and above	12	19.0	2.3030	.34744	.10030	2.0823	2.5238	1.73	2.82
	Total	63	100%	2.3911	.32022	.04034	2.3104	2.4717	1.27	2.91
Type of services	Child and Mother Care	24	38.1	2.3977	.32260	.06585	2.2615	2.5339	1.64	2.91
	Immunization	5	7.9	2.5818	.19917	.08907	2.3345	2.8291	2.27	2.82
	Emergency	27	42.8	2.3367	.32760	.06305	2.2071	2.4663	1.27	2.82
	Nutrition	1	1.6	1.9091	.	.	.	.	1.91	1.91
	Health Education	3	4.8	2.3636	.31492	.18182	1.5813	3.1459	2.00	2.55
	Non Transmissible Diseases	2	3.2	2.6364	.12856	.09091	1.4813	3.7915	2.55	2.73
	Family Planning	1	1.6	2.8182	.	.	.	.	2.82	2.82
Total	63	100%	2.3911	.32022	.04034	2.3104	2.4717	1.27	2.91	

No. = Number of group study

Table 7. ANOVA Analysis

Beneficiaries' satisfaction with health services		Sum of Squares	df	Mean Square	F	Sig.
Age	Between Groups	.959	5	.192	2.026	.089
	Within Groups	5.398	57	.095		
	Total	6.358	62			
Academic achievement	Between Groups	.419	4	.105	1.022	.403
	Within Groups	5.939	58	.102		
	Total	6.358	62			
Type of services	Between Groups	.800	6	.133	1.344	.253
	Within Groups	5.557	56	.099		
	Total	6.358	62			

df = degree of freedom, F = frequencies, sig. = significant

Relationship between the Sex of the study group and their satisfaction with health services

To determine if there are any significant differences between the average satisfaction levels of men and women, a T-test analysis was conducted, tables No. 4 and No. 5 revealed that out of the beneficiaries in the study group, (11) were male (17.5%) and (52) were female (82.5%), the analysis showed that there is no significant difference between the beneficiaries' satisfaction levels, assuming equal variances with a mean score of (.556) for all items related to satisfaction with health services, assuming unequal variances the mean score for all items related to satisfaction with health services is (.667) at ($P>0.05$).

Relationship between the Ages of the study group and their satisfaction with health services

Table No. 6 shows that the majority of the study sample (41.3%) belongs to the age group of (25 years and younger), the second largest age group is between (26-29 years) making up (30.1%), other age groups include (30-34 years) in (12.7%), (35-39 years) in (4.7%), (40-44 years) in (3.2%), and (45 years and above) in (8%). Using Anova-analysis, we can statistical comparison between the arithmetic means of the variables used in the study sample, table No. 7. shows that there is no significant difference between the ages of the beneficiaries and their level of satisfaction with the health services provided between the group with a mean score of (.192) and their level of satisfaction with the health services provided within the groups with a mean score of (.095) at ($P>0.05$).

Relationship between the Academic Achievement of the study group and their satisfaction with health services

The study sample is also distinguished by academic achievement, with primary school graduates having the highest percentage at (27%), followed by those who are not proficient in reading and writing at (22.2%), those who are proficient in reading and writing at (11.2%), high school graduates at (20.6%), and university graduates or above at (19%). Using Anova-analysis, we can statistical comparison between the arithmetic means of the variables used in the study sample, table No. 7. shows that there is no significant difference between the academic achievement of the beneficiaries and their level of satisfaction with the health services provided among the group with an average score of (.105), and their level of satisfaction with the health services provided within the groups with an average score of (.102) at ($P>0.05$).

Relationship between the Type of Services Received by the study group and their satisfaction with health services

In terms of services received, emergency services make up the highest percentage at (42.8%), followed by mother and child care services at (38.1%), the remaining services are distributed as follows: vaccination services (7.9%), nutrition services (1.6%), health education services (4.8%), non-communicable diseases services (3.2%), and family planning services (1.6%). Using Anova-

analysis, we can statistical comparison between the arithmetic means of the variables used in the study sample, table No. 7. shows that is also no significant difference between the type of services that beneficiaries receive and their level of satisfaction with the health services provided with an average score of (.133), and their level of satisfaction with the health services provided within the groups with an average score of (.099) at ($P>0.05$).

Discussion

The study's findings show that a large majority of the individuals who received healthcare services at Maysan Child and Maternity Hospital were female, as they made up 82.5% of the sample population, this is not surprising as the hospital specializes in treating gynecological diseases, providing care for both natural and artificial childbirths, as well as treating various illnesses that affect children.

The study showed that individuals aged (25 years and under) constitute the largest group benefiting from health care services at a rate of (41.3%) of the total, while individuals aged (45 years and over) constitute the smallest group at only (8%), and this percentage corresponds to the ages of Females during periods of marriage, pregnancy, and childbirth, these periods are often associated with various diseases and conditions that require periodic visits to the hospital to obtain appropriate care, in some cases medical, surgical, and therapeutic interventions may be necessary.

When observing the academic achievement of the sample, it was noted that the majority were primary school graduates, amounting to (27%), while the lowest percentage was for those who were proficient in reading and writing amounting to only (11.2%), the reason is that societal values in the Maysan Governorate, located in southern Iraq, are characterized as rural values, it has a male orientation, and in recent years, there has been a trend not to integrate females into schools at a higher rate than males, or at least to allow them to complete the primary stage only, but in the past few years, society's view of education has changed, and the Ministry of Education has opened many literacy centers in various regions of Iraq.

As for the type of services they receive in terms of sample distribution, emergency services reached (42.8%), and mother and child care services (38.1%), which is the largest percentage among the types of services, the lowest percentage was for vaccination services and family planning services with the same percentage, which is (1.6%). Emergency services mean all cases that require urgent medical intervention, such as cesarean sections for women, treatment of high blood pressure during pregnancy, miscarriages, cases of dehydration in children, thermal epilepsy, and others. cases, followed by various health services to care for the pregnant mother during pregnancy and its accompanying health problems or interactions with other accompanying diseases, or care for the

newborn child who may suffer from various medical conditions such as delayed growth and others. As for the rest of the medical services, they were in similar proportions, such as vaccination programs. The pregnant mother and the child, or treating malnutrition and anemia that may affect both the pregnant mother and the child, as well as treating diseases that may affect the pregnant mother, such as atherosclerosis and diabetes, as well as family planning programs, such as giving contraceptives such as pills, intrauterine devices, or condoms. Among the current services are health awareness and education programs in various aspects of improving the lives of mothers, pregnant women, and children.

The study concluded that the level of satisfaction of the research sample with the comprehensive health services provided at Maysan Child and Maternity Hospital was high, and this is what we notice through the arithmetic average that appeared (2.40), which is higher than the standard average (2), the total standard deviation was (0.758), coefficient of variation was (0.321). The research found that there were no statistically significant differences between the sex of the beneficiaries and their level of satisfaction with the health services provided at ($P>0.05$), there were no statistically significant differences between the ages of the beneficiaries and their level of satisfaction with the health services provided at ($P>0.05$), also no statistically significant differences between the academic achievement of the beneficiaries and their level of satisfaction with the health services provided at ($P>0.05$), and there are no significant differences between the type of services that the beneficiaries receive and their level of satisfaction with the health services provided at ($P>0.05$).

The results of the current study are fully consistent with a study entitled "Measuring Indicators of the Quality of Health Services from the Perspective of Patients: An Exploratory Study of a Sample of Patients from the University Hospital in the city of Batna", which was conducted in Algeria, which concluded that there were no statistically significant differences in the estimates of the sample group based on sex, age, and educational level (Al-Tayeb, 2014). The results of this study are also consistent with another study conducted in the State of Palestine entitled "The impact of the quality of health services on patient satisfaction in private hospitals in the Gaza governorates" which concluded that there is no statistically significant relationship between the quality of health services and patient satisfaction, regardless of sex, age, and qualification scientific (Al-Jadi, 2018). The results of this study are consistent with the results of a study entitled "The Impact of the Quality of Health Services on Patient Satisfaction in Algerian Public Hospital Institutions: A Case Study of a Sample of Patients from the Public Hospital Institution in Tablat in Medea," which was conducted in Algeria, as it concluded that there was no statistically significant effect for the variables (sex, age, educational level) on patient satisfaction (Bushra, 2020). The study conducted by Abdul

Rahman entitled "Factors affecting patients' satisfaction with health services" only matched the results of the current study in the variable of sex and age, which concluded that sex and age did not affect the opinions of the study sample, the educational level and functional status have effect (Abdul Rahman, 2022). Laila's study, entitled "The Impact of the Quality of Health Services on Consumer Satisfaction, An Applied Study on Some Hospital Health Institutions in the State of Adrar using a Structural Equation Model for the period (2015/2016) in Algeria", concluded that there is a statistical significance for the beneficiaries satisfaction with the variables of sex, age, and educational level, which was inconsistent with the current study (Laila, 2016).

Conclusion

These findings underscore the importance of prioritizing beneficiary satisfaction to optimize healthcare delivery and meet evolving healthcare needs, the satisfaction of beneficiaries of health services is considered one of the important goals that health institutions set in their plans to gain the loyalty of beneficiaries, and it also serves as a measure for determining the level of employee performance that enables the departments in these institutions to take steps in this context. Researchers recommend that the hospital administration should monitor the performance of its employees regularly to identify any cases of neglect or abuse towards the patients, the administration must respond quickly to all complaints submitted by the beneficiaries to identify any problems, solve them, and improve performance, it is important to note that the requirements of the beneficiaries keep changing according to their medical conditions; hence, the hospital administration needs to constantly monitor, follow up, and be aware of the trends, the hospital should conduct more awareness and guidance lectures for the beneficiaries of health services to clarify the series of medical and administrative procedures followed in the hospital, the administration should also invite leading and successful health institutions to agree and participate in the levels of health service provision, Additionally, researchers should be invited to conduct research and studies concerned with the satisfaction of beneficiaries of health services to more accurately identify the problems and obstacles that prevent reaching high rates in this subject.

Author contributions

S.B.A., and R.B.S., wrote, drafted, reviewed, and edited the paper. All authors have read and agreed to the published version of the manuscript.

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Competing financial interests

The authors have no conflict of interest.

References

- Abbas, Sami A. (2014). Measuring the quality of health services in government hospitals, an applied study on government hospitals in the city of Taiz - Yemen from the point of view of the beneficiary. *Journal of Baghdad College of Economic Sciences*, (39), 259 - 282.
- Abd Al-Rahman, Dalia M. (2022). Factors affecting patients' satisfaction with health services (case study). *Arab Journal of Educational and Psychological Sciences* 6(26), 213-230.
- Abd Al-Razzaq, Alaa N. (2011). The use of information technology to ensure the quality of health services: case study in a sample of hospitals in the city of Baghdad. *Journal of Administration and Economics*, (90), 281- 298.
- Abu Al-Nasr, M. Mahmoud. (2008). *Total Quality Management*. The Nile Arabic Collection, first edition, Cairo, Egypt.
- Al-Ali, Abdel Sattar, (2010). *Applications in Total Quality Management*. Dar Al Masirah for Publishing and Distribution, Amman, Jordan.
- Al-Demerdash, Talaat, (2006). *The Economics of Health Services*. Al-Quds Library, Zagazig, Egypt.
- Al-Jadi, Bilal J. (2018). The impact of the quality of health services on patient satisfaction in private hospitals in the Gaza governorates. Master's thesis, Islamic University, Gaza Strip.
- Al-Taweel, Akram A., Al-Jalili, Alaa H., Wahab, Riyad J. (2010). The possibility of establishing dimensions of the quality of health services: a study in a selected group of hospitals in Nineveh Governorate. *Tikrit Journal of Economic Sciences*, 6 (19), 9-38.
- Al-Tayeb, J. (2014). Measuring indicators of the quality of health services from the perspective of patients: an exploratory study of a sample of patients from the university hospital in the city of Batna - Algeria. *Economic Perspectives*, (7), 101-117.
- Bushra, Bouhalfaya. (2020). The impact of the quality of health services on patient satisfaction in Algerian public hospital institutions: a case study of a sample of patients from the public hospital institution in Tablat, Medea. Master's thesis, majoring in Business Administration, Faculty of Economic, Commercial and Management Sciences, Larbi Ben M'hidi University, Algeria.
- Karim, kaznak k. (2016). Analysis of health services in the main hospitals in the city of Erbil for the period 2010-2015. *Anbar University Journal of Economic and Administrative Sciences*, 8(16), 362-392.
- Khosrov, A. Muhammad. (2008). *Marketing health services*. Specialized Diploma Research, Hospital Administration, International Consulting Center for Administrative Development, Britain.
- Kotler, Philip & Armstrong, Gary, (2015). *Principles of Marketing*. 16th edition, Pearson Education, United States of America.
- Laila, Ayad. (2016). The Impact of the Quality of Health Services on Consumer Satisfaction, An Applied Study on Some Hospital Health Institutions in the State of Adrar using a Structural Equation Model for the period (2015/2016) in Algeria. Doctoral thesis, Faculty of Economic, Commercial and Management Sciences, Abu Bakr Belkaid University - Tlemcen, Algeria.
- Mazriq, Ashour. (2010). Total quality management and organization performance development. Faculty of Economic, Commercial and Management Sciences, University of Dr. Tahar Moulay, National Scientific Forum, Algeria.
- Murizq, Muhammad A. (2012). *Introductions to Health Administration*. Dar Al-Raya for Publishing and Distribution, Amman, Jordan.
- Russell, Roberta S., Taylor, Bernard W. (2000). *Operation Management: Multimedia Version*. 3rd edition, practice Hall International.
- Saleh, Mubarak. (2019). The role of comprehensive quality management in improving health services: a case study of the Public Institution for Neighborhood Health in Biskra. Master's thesis, specializing in management and management of institutions, Faculty of Economic, Commercial and Management Sciences, Mohamed Kheidar University, Biskra, Algeria.
- Salmi, R. & Bosta, A. (2014). The importance of quality health service in achieving customer satisfaction. *Management and Development Journal for Research and Studies*, 3(1), 137-157.
- Touiti, M. & Boudad, B. (2018). Modeling the causal relationship between the perceived quality of service and the value of the customer in a way that enhances his satisfaction towards the institution. *Journal of Strategy and Development*, 8(15), 108-133.
- Wafia, Q. (2020). The role of the quality of services of private health institutions in achieving customer satisfaction: case study of Al-Shifa Clinic in Al-Tahir-Jijel. Master's degree, majoring in service marketing, Department of Commercial Sciences, Faculty of Economics, Commercial Sciences and Management Sciences, Al-Siddiq Muhammad Bin Yahya University, Algeria.
- Youssef, A. & Tishat, S. (2020). The reality of health services quality and their impact on patient satisfaction in ophthalmology hospital friendship algeria-cuba (ouargla). *Algerian Journal of Economic Development*, 1(7), 237-248.
- Zadira, Sharaf al-Din. (2017). The role of comprehensive quality management in improving the quality of hospital services. Doctoral thesis in management sciences, specializing in organization management, Faculty of Economic, Commercial and Management Sciences, Mohamed Kheidar University, Biskra, Algeria.