

Original Article

Asthma Patients Satisfaction towards Nursing Management at Alshaab Teaching Hospital - Khartoum State 2023.

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Received: 31. May. 2024

Accepted: 23. June. 2024

Abstract

Background: Patient satisfaction is the perception of the level of care received compared with the care expected and represents a balance between the perception and expectation of the nursing care received. Patients' satisfaction with nurses' care has become a significant way to measure the quality of care.

Objective: To study the level of asthma patients' satisfaction towards nursing management.

Methods: A hospital-based cross-sectional study was conducted at Al-Shaab Teaching Hospital. The sample size was 129 patients. All patients who fulfilled the inclusion criteria were interviewed. Data were collected using a standardized administered questionnaire and analyzed by the Statistical Package for Social Sciences (SPSS) version 25, presented in the form of tables and figures.

Results

38% of the patients were aged between 25-44 years, and 78.3% were non-smokers. Patients were satisfied regarding the cost of asthma care, availability of medications, time that nurses spent with patients, and quality of information received from nurses at 51.2%, 49.6%, 76.7%, and 9.8% respectively. Overall, 69% of asthmatic patients had a strong level of satisfaction related to nursing management.

Conclusion

The study concluded that most patients had a strong level of satisfaction related to nursing management. There was a statistically significant association between total satisfaction, treatment regimen, and the periodicity or frequency of asthmatic attacks, with a P-value of 0.01.

Keywords: Asthma, Management, Nursing, Patient, Satisfaction.

Introduction

Patient satisfaction is the perception of care received compared with the care expected and represents a balance between the perception and expectation of the nursing care received (1). According to the latest World Health Organization in 2019, it has been estimated that 262 million people are currently suffering from asthma, and there were 461,000 deaths because of asthma. It is one of the main diseases that cannot be transmitted from one person to another. It is an incurable disease of the airways that differs in frequency and severity from person to person. It affects both old and young people, and it can start at any age (1, 2). The outcome of any disease is influenced by the decisions to seek care, timely arrival at appropriate diagnostic and treatment services, and the receipt of adequate care from service providers (1). Patient satisfaction has become an established outcome indicator of the quality and efficiency of the healthcare system and can be an important tool to improve the quality of services (3).

Patient satisfaction with nursing care has been identified as an important nursing quality outcome indicator. Owing to the nature of nursing, patients may judge the overall quality of hospital services based on their perception of the nursing care received. Patients who are more satisfied with their care are more likely to follow medically prescribed regimens, thus contributing to a positive influence on health. Research has also indicated that good communication between the patients and the provider of healthcare is a vital factor for patient satisfaction (3).

A very important aspect on which patient satisfaction depends is ‘nursing care’ because nurses are involved in almost every aspect of a client’s care in the hospital. Nurses interact with patients more often than any other healthcare personnel in a hospital (4). Patient satisfaction is defined as “the fundamental measure providing information on to what extent values and expectations of a patient are met and indicating the quality of the care in which the major authority is the patient” (5). Nursing care and the relevant satisfaction, however, were initially

defined as “the harmony between ideal nursing care and the nursing care that a patient receives.” Patient satisfaction may vary depending on a variety of factors including physical and environmental conditions of a hospital, hospital staff, and features of a hospital. One of the most important factors influencing the satisfaction of hospitalized patients is the nursing care (6).

Based on this fact, understanding consumers' views is essential if any service is to be developed or improved. Though such reforms are in place, studies on the level of patient satisfaction with the nursing care they received and factors determining their satisfaction levels are limited. Therefore, this study was intended to assess the level of adult patients' satisfaction in nursing care and factors affecting their satisfaction in dire public hospitals.

Methods

A hospital-based cross-sectional design was adopted in the present study. This study was carried out at Al-Shaab Teaching Hospital in Khartoum locality,

which is the largest referral cardio-thoracic center in Sudan. It provides services to citizens referred from all hospitals in Sudan. The study involved a group of patients. The targeted population was adult asthmatic patients who were Sudanese, composed of different ethnic groups and both genders, admitted to the respiratory clinic and asthma care unit, and diagnosed with bronchial asthma. The sample included 129 patients who were enrolled in the study. All patients who fulfilled the inclusion criteria were interviewed. The data were collected by trained research teams using a standardized questionnaire. The data were analyzed using the Statistical Package for Social Sciences (SPSS), version 25, and a significance test was checked by chi-square test, with the results accepted when the p-value was 0.05% or less. Ethical approval was obtained from the Institutional Review Board at Al Neelain University, permission from the Khartoum State Ministry of Health, and permission from the hospital authorities. Informed consent was obtained from each participant before the interview.

Results

Table (1): Scio demographic characteristic of Patients'

Characteristic	Frequency	Percentage %
Age groups		
less than 25 years	19	14.7
25- 44 years	49	38.0
45 - 65 years	43	33.3
More than 65 years	18	14.0
Total	129	100.0
Gender		
Male	72	55.8
Female	57	44.2
Total	129	100.0
level of education		
Illiterate	12	9.3
Primary	22	17.1
Intermediate	24	18.6
Secondary school	39	30.2
University	32	24.8
Total	129	100.0
Marital status		
Single	36	27.9
Married	71	55.0
Divorced	12	9.3
Widow	10	7.8

Total	129	100.0
Current occupation		
Employee	25	19.4
Student	21	16.3
Worker	57	44.2
Unemployed	26	20.2
Total	129	100.0
Cigarette Smoking		
Yes	35	27.1
No	94	72.9
Total	129	100.0
Smoking status		
current smoker	11	8.5
Ex -smoker	17	13.2
Non - smoker	101	78.3
Total	129	100.0

38% of patients were aged between 25- 44 years.

Table (2): Patients Satisfaction Regarding Nursing Management :

	Frequency	%	Frequency	%	Frequency	%	Frequency	%	
Satisfaction regarding cost	47	36.4	66	51.2	11	8.5	5	3.9	2.22
Satisfied about number of nurses	65	50.4	57	44.2	5	3.9	2	3.9	
Satisfied about availability of the medication	45	34.9	64	49.6	18	14.0	2	1.6	
Time that you spent	99	76.7	28	21.7	1	21.7	1	0.8	
Satisfy with the quality of information	103	79.8	21	16.3	3	2.3	2	1.6	
Satisfy about nursing care	105	81.4	19	14.7	1	.8	4	3.1	
Total	464	60	255	33	39	5	16	2	

The overall mean of client satisfaction was 2.22 which means client were satisfied regarding nursing management.

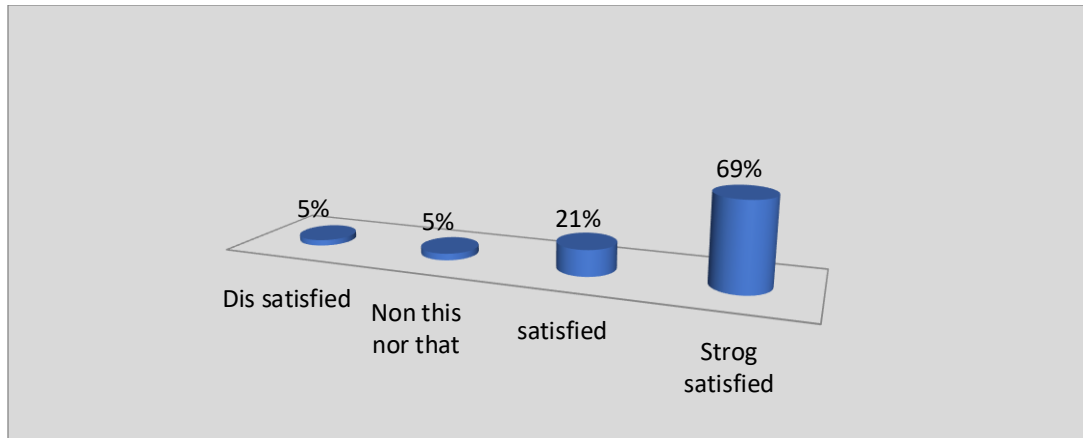


Figure (I): The Overall level of satisfaction of asthmatic patients

69% of asthmatic patients had a strong level of satisfaction related the nursing management.

Table: (3) The Overall level of satisfaction versus Asthma duration and treatment regimen

Model	Dependent Variable Total of Satisfied			
	Coefficients	Sig.	R	F(Sig)
(Constant)	10.173	0	0.279	0.017
Length of Asthma	-0.780	0.003		
Asthma treatment regimen	0.178	0.189		
Frequency of attacks	0.388	0.306		

There was a direct affect between total satisfaction and all of (length of asthma-treatment regimen - frequency of attacks) with F-Sig (0.017) and 95% confidence level. While the Correlation coefficient (R= 0.279) describes the relation.

Discussion

The study participants aged between 25-44 years, indicating that bronchial asthma prevails among both young and elder participants. This result is concurrent with a study conducted by Abd El-Fatah H et al. among Egyptians, which revealed that the majority of patients were aged between 60 and 69 years (7). The study revealed that half of the patients were satisfied with the cost of asthma care, likely due to patients receiving medications for free in the emergency room. This result is concurrent with a study conducted by Jansson S et al. in Sweden (8). The study indicated that half of the study patients were “strongly satisfied” with the number of nurses providing care, and less than half were satisfied with the availability of medication.

These findings may be due to the high cost of asthma medications. This result is concurrent with a study conducted in Nigeria and many similar studies reported from other low-income countries, which all show the non-availability and high cost of asthma medications (9-11). Half of the patients were “strongly satisfied” with the time that the nurses spent with them. Longer consultations may enable nurses to provide health education information and to truly understand, explore, and address underlying problems (12). This result is concurrent with a study conducted by Miranda GH et al., which shows that patients were generally very satisfied with the time that nurses spent with them (13). Regarding the quality of information, a higher percentage of patients were satisfied with the quality of information given by the nurses. This indicates that nurses provide sufficient time for the

patients, which may increase their satisfaction. The findings are less than the study conducted in the Kingdom of Saudi Arabia [KSA], which revealed that 96.6% of the patients were satisfied. This might be due to differences in the participants' characteristics and the advancement of technologies used to provide quality nursing care (12). Eighty-one percent of the patients were strongly satisfied with the nursing care. This might be related to the presence of nurses around them and their approach to communication. This specific finding is in disagreement with a study conducted in Ethiopia (13). A strong level of satisfaction was reported by 69% of asthmatic patients regarding nursing management. However, 31% of respondents were dissatisfied, which may be due to nurses being unable to provide individual attention to patients because of heavy workloads in the emergency

setting. This finding is inconsistent with a study conducted by Keerthi M in a tertiary care hospital in Chandigarh, which revealed that about half of the subjects were highly satisfied with the nursing care received during their hospital stay (14). There is a strong statistically significant association between total satisfaction, treatment regimen, and frequency of attack (P value = 0.000). This indicates that satisfaction increased with length and reflected patients' perspectives directly related to the outcome. This result is in line with a study conducted by Ahmed T et al. in Ethiopia, which revealed that more than half of the respondents were satisfied with the nursing care they received (13).

Conclusion

Most of the study participants were satisfied with the quality of information given by the nurses and the time that the nurses spent with them, and had a strong level

of satisfaction related to nursing management. The study found a direct statistically significant effect between total satisfaction and all of (length of asthma, treatment regimen, and frequency of attacks) with a P value = 0.000 and a 95% confidence level.

Acknowledgement

First and foremost, I would like to thank my merciful Allah for giving us the strength and health to do this work. I express my sincere thanks to my main supervisor, Professor Mustafa Khidir Mustafa Elnimeiri, and my co-supervisor, Dr. Amal Badawi Bushra, who guided me through this manuscript preparation and helped me unconditionally. I would like to express my deep gratitude to the nurses who participated in this study for their help in collecting the data. My thanks are extended to the staff of Alneelain University - Faculty of Nursing Science.

References:

- 1- Sman R., Ahmed K, & ElSony A. Factors associated with uncontrolled asthma among Sudanese adult patients. *Journal of the Pan African Thoracic Society*, (2021). 2(2), 85-93 Available at: <https://patsjournal.org/factors-associated-with-uncontrolled-asthma-among-sudanese-adult-patients>. Accessed on: 21/12/2022.
- 2- Karis M. "Asthma Patient Education (Adult Onset) From Nursing Perspective." (2021). Available at: <https://www.theseus.fi/handle/10024/511358>. Accessed on: 3/10/2021.
- 3- Mohanan K., Kaur S, Das K & Bhalla A. Patient satisfaction regarding nursing care at Emergency Outpatient Department in a Tertiary care Hospital. *J Mental Health Hum Behav*, (2010). 15(1), 54-8 Available at: <https://ipsnz.org/wp-content/uploads/2019/10/Ed->

- 2020_9.pdf. Accessed on: 10 /10. 2021.
- 4- Ahmed, T., Assefa, N & Asrat Demisie, A. K. Levels of adult patients' satisfaction with nursing care in selected public hospitals in Ethiopia. *International journal of health sciences*, (2014). 8(4), 371 Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4350891>. Accessed on: 10/10/ 2021.
 - 5- Voyce J, Gouveia M J, Medinas M A , Santos A S & Ferreira R F. (2015). A Donabedian model of the quality of nursing care from nurses' perspectives in a Portuguese hospital: A pilot study. *Journal of nursing measurement*, 23(3), 474-484. Available at: <https://connect.springerpub.com/content/sgrjnm/23/3/474.abstract>. Accessed on: 10 /3/ 2021.
 - 6- Akbas M. (2019). Patient satisfaction on nursing care: the case of gynecology and obstetrics clinics. *Acta bioethica*, 25(1), 127-136. Available at: <https://revistadematematicas.uchile.cl/index.php/AB/article/view/53578>. Accessed on: 11 /10/ 2021.
 - 7- Amorha K C, Okonta M J & Ukwe C V. (2021). Patients' Satisfaction with Pharmaceutical Care Services in Asthma: An Intervention Study in 2 Nigerian Hospitals. *Journal of Patient Experience*, 8, 23743735211034339. Available at: <https://journals.sagepub.com/doi/pdf/10.1177/2374373521103439> Accessed on: 21/12/ 2022.
 - 8- Jansson S. A., Backman H, Andersson, M, Telg, G. & et al. Societal costs of severe asthma in Sweden. (2018). Available at: https://erj.ersjournals.com/content/52/suppl_62/PA1157?utm_source=TrendMD&utm_medium=cpc&utm_campaign=European_Respiratory_Journal_TrendMD_0. Accessed on: 26/2/ 2023.
 - 9- Hannane A, Misane L, Devouassoux , G & et al. Asthma patients' perception on their care pathway: a qualitative study. *Prim. Care*

- Respiratory. *Med.* 29, 9 (2019). Available at: <https://doi.org/10.1038/s41533-019-0121-2> Accessed on: 21/12/2022.
- 10- Laurant, M. G., Hermens, R. P & et al. An overview of patients' preference for, and satisfaction with, care provided by general practitioners and nurse practitioners. (2018). *Journal of clinical nursing*, 17(20), 2690-2698. Available at: <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1365-2702.2008.02288.x>. Accessed on: 21/12/2022.
- 11- Amorha, K. C., Okonta, M. J., & Ukwe, C. V. Patients' Satisfaction with Pharmaceutical Care Services in Asthma: An Intervention Study in 2 Nigerian Hospitals. *Journal of Patient Experience*, 8, 23743735211034339. (2021). Available at: <https://journals.sagepub.com/doi/pdf/10.1177/23743735211034339> Accessed on: 21/12/2022.
- 12- Egere, U., Shayo, E., Ntinginya, N. & et al. Management of chronic lung diseases in Sudan and Tanzania: how ready are the country health systems? *BMC Health services* 21, 734 (2021). Available at: <https://doi.org/10.1186/s12913-021-06759-9> Accessed on: 21/12/2022.
- 13- Ahmed, T., Assefa, N., Demisie, A., & Kenay, A. Levels of adult patients' satisfaction with nursing care in selected public hospitals in Ethiopia. *International journal of health sciences*, 8(4), 371. (2014). Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4350891> Accessed on 23/12/2022
- 14- Mohanan, K., Kaur, S., Das, K., & Bhalla, A. Patient satisfaction regarding nursing care at emergency outpatient department in a tertiary care hospital. *J Mental Health Hum Behav*, (2010). 15(1), 54-8. Available at: https://ipsnz.org/wp-content/uploads/2019/10/Ed-2010_9.pdf Accessed on 27 / 3 / 202