https://doi.org/10.21608/zumj.2024.234154.2873

**Volume 30, Issue 7, Oct. 2024** 

Manuscript ZUMJ-2407-3474
ORIGINAL ARTICLE

DOI . 10.21608/ZUMJ.2024.304433.3474

# **Customer Satisfaction and Utilization of Emergency Services**

Marwa Bayomi Awad<br/>Allah Mohamed $^{1},$  Zeinab Hamed Sawan $^{2},$  Ahmed Mokh<br/>tar Mohamed Mohamed  $^{3},$  Hanaa Salah Sai<br/>d $^{4}$ 

<sup>1</sup>Public Health and Community Medicine Department, Faculty of Medicine, Zagazig University, Egypt

# Corresponding author\*

Mokhtar Mohamed Mohamed

### **Email:**

elsadanyahmed2@gmail.com

Submit Date: 14-07-2024 Revise Date: 20-07-2024 Accept Date: 30-07-2024



#### **ABSTRACT**

Customer satisfaction is a universal concern that impacts enterprises of all sizes, whether they are for-profit or non-profit, and whether they operate on a global or local scale. Therefore, it is crucial for every firm, including hospitals, to have a comprehension of the aspects that impact customer satisfaction. A study proposed that the correlation between the use of resources and patient satisfaction may be due to the perception that patients have. They believe that doctors who allow them to stay in the hospital for a longer period or conduct additional tests demonstrate a greater concern for their well-being. Consequently, these patients feel more confident that their concerns are being acknowledged and dealt with by their physicians. A comprehensive analysis of primary care patients revealed numerous studies that established a direct correlation between meeting patient expectations and their overall satisfaction with the care received. However, it was also observed that physicians often misinterpret patients' desire for information as an expectation for a specific course of action.

**Keywords:**Customer Satisfaction, Emergency Services, Health Care.

# INTRODUCTION

A measure of a patient's happiness with the care they have received from their healthcare provider is called patient satisfaction [1].

Patient satisfaction is a specific type of customer satisfaction metric that is measured by a self-report research and is used as a performance indicator to evaluate the quality of healthcare [2].

Evaluating healthcare supply is essential for continuously assessing and improving the quality of healthcare services. Historically, assessments have prioritized physiological reports of patients' outcomes over their input. In recent decades, healthcare systems have increasingly emphasized the importance of providing a balance between evidence-based clinical care and the actual delivery of that care. Numerous initiatives have been made to identify the precise elements of medical treatment that are most likely to affect patient satisfaction [1].

# **Qualityin Health Care**

Plato associated the concept of quality with

AwadAllah, M. et al 3444 | Page

<sup>&</sup>lt;sup>2</sup>Anesthesia and Intensive Care Units Department, Faculty of Medicine, Zagazig University, Egypt

<sup>&</sup>lt;sup>3</sup>M.B; B.CH, Family Medicine Resident at Mushtool Elsook District, Zagazig University, Egypt

<sup>&</sup>lt;sup>4</sup>Family Medicine Department, Faculty of Medicine, Zagazig University, Egypt

the excellence and superior intellectual and physical abilities of an individual. In modern times, quality refers to a perception of superiority and excellence that is associated with obtaining high-quality items or using a popular service because of their exceptional characteristics [3].

According to Abbott and Firestone, quality is the result of combining the perceived value of a good or service with the cost to the customer. Conversely, Gilmore defines quality as adherence to predetermined criteria, but Crosby views quality as the outcome of meeting consumer expectations. Deming presents the PDCA cycle and sees quality as a continual process of improvement [4].

The key dimensions of quality in services are as follows [5]:

Reliability refers to the capacity to consistently deliver the intended service with accuracy. Response; the operator's willingness and desire to effectively serve the consumer. Security; the instruction of staff members in order to ensure client pleasure. Accuracy; the precise and successful completion of the service on the initial attempt. Uniqueness; the creation of a service that is distinct for every individual user.

Quality is a continuous endeavor undertaken by all members of a company with the objective of meeting the demands and expectations of customers. According to Ovretveit, quality in healthcare is meeting patient needs at the lowest possible cost. He goes on to say that a thorough definition of quality should incorporate an expert evaluation of the needs of the clients, the extent to which the services offered satisfy those needs, and the clients' perspectives of the satisfaction of their needs [6].

The primary goals of health units are to accurately diagnose, treat, and rehabilitate patients. Previously, health agencies believed that patient happiness was solely determined by the delivery of excellent medical services. However, over time, it has become apparent that patient expectations have risen. The concept of quality in the health sector is intricate due to its unique dynamics and multifaceted nature, which encompasses both past and present experiences. Within the health sector, which relies more on labor than capital, there is a clear discrepancy in how quality is understood by both patients and healthcare professionals [7].

There are many different definitions of quality in healthcare, and most of them depend on the person giving the definition. Some contend that due to the intricate nature of quality in healthcare, it is not feasible to quantify it. However, some individuals argue that certain features of it can be recognized and analyzed, while others do not provide specific details [8].

Quality refers to the level of care that aims to optimize the overall living conditions and well-being of patients, while considering the advantages and disadvantages associated with the healthcare process. Filiatrault et al. describe quality as the pursuit of ongoing enhancements in healthcare methodologies. In 1990, the USA Institute of Medicine provided a definition for the quality of health. They define it as the degree to which health services improve the likelihood of achieving desired health outcomes and are in line with the most recent scientific knowledge for individuals as well as for entire communities 191.

Ovretveit asserts that the quality of health

AwadAllah, M. et al 3445 | Page

care is intricately linked to factors such as appropriateness, accessibility, dignity, safety, responsiveness, efficacy, continuity, and efficiency. Three dimensions are used to evaluate the quality of health services [10]; Structure Quality encompasses both the qualities of the healthcare system and the attributes of health professionals. Structure various quality encompasses variables including organizational structure, financial resources, logistical specialization composition, service adequacy, accessibility, management, facilities, funding, management control, staff composition, and training level in quality matters [11]. The process mostly entails assessing the patient's overall progress [12]. Outcomes and Quality of Life are related to how the service affects health overall. Because different people within the health system have varied perceptions of the desired outcome, the quality of the results may vary. At first, the results depend on how well the patient responded to the medical intervention and what benefit they received [6]. The outcomes are the determining factors that eventually influence the perceived excellence of the healthcare system in the given setting. The enhancement is achieved by individually improving these two previously mentioned aspects [13].

Thus, while hospitals still prioritize the diagnosis, treatment, and rehabilitation of patients, the management department now takes on other objectives. The worldwide redesign and restructuring of the health sector continues to be a significant issue because to the effects of globalization, the escalating prices of healthcare services, and the growing awareness and concern for health-related

matters in society. Therefore, it is crucial for a hospital to offer exceptional healthcare services that are acknowledged by patients [14].

### **Patient Satisfaction**

Currently, despite the seeming simplicity of understanding the idea of "patient satisfaction" in relation to healthcare services, numerous challenges arise when attempting to establish a universally agreed definition. Donabedian defines patient satisfaction as a metric that assesses the ultimate advantages that a patient obtained from healthcare services. Patient satisfaction is contingent upon the quality of care provided, which is directly linked to the patient's expectations and perceived value [15].

Conversely, the Yucelt defines patient satisfaction as whether or not the expected levels of performance and quality of health services are met Kotleretal [16] it is stated that while the primary concern of patients in a hospital is receiving care, there are various other elements that can impact their satisfaction. Patients typically assess the quality of healthcare based on the healthcare unit's handling of complaints, the attitude of the staff, the timeliness of care, and the overall atmosphere of the facility. The assessment of quality by patients is a notably intricate procedure owing to the subsequent factors [17].

A great deal of ambiguity on the nature of health services, Owing to the nature of the service, it is impossible to predict patients' demands. The incapacity to compare competitive hospitalization units in a meaningful way. Insufficient information provided by the patient.

When utilizing healthcare services induces

AwadAllah, M. et al 3446 | Page

feelings of unease and uncertainty. The survey found that consumers generally have fundamental criteria for evaluating services that align with the primary indicators of quality [5]. The key factors of utmost importance include reliability, responsiveness, proficiency, accessibility, politeness, helpfulness, respect, professionalism, and confidence [18].

According to study, the communication abilities of medical physicians improve the perception and level of patient satisfaction. Hence, medical professionals have the capacity to influence patients' decision-making by enhancing their communication with them [19].

According to **Black et al.** Enhanced patient satisfaction is a crucial competitive advantage for healthcare facilities [20]. Service quality is widely acknowledged as a crucial factor in the healthcare industry. Patient satisfaction, as assessed by Pascoe, refers to the whole perception of the service received, taking into consideration past experiences. The overall perception is influenced by the observation of environmental situations or alterations in behavior [21].

Two intriguing views elucidate the patients' inclination to maintain sympathy with their happiness despite the challenges faced during their hospitalization [22].

The first argument suggests that a patient will still value the quality of treatment even if their expectations go beyond the responsibilities of health professionals.

The second argument posits that even if the patient perceives the health professional as not doing their duties efficiently, they still value the overall experience offered. Undoubtedly, evaluating and interpreting patients' pleasure is a complex yet intriguing task for healthcare administrators. Mazurenko et al. assert that accurately measuring patients' emotions is a significantly more difficult task than identifying the curvature of a tire [23].

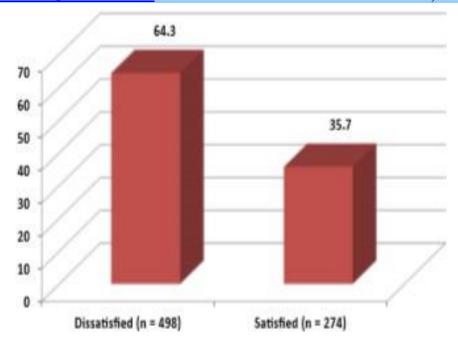
Assessing the contentment of patients is a crucial measure of the presence and extent of healthcare quality. Patients possess the capacity to identify and assess the quality of healthcare services rendered to them, as well as the results of their health enhancement. Therefore, it is crucial that most researchers recognize the significance of including the perspectives of patients in the development of services and their choices for care [24].

This research is the first of its kind in Cyprus, as it examines consumer satisfaction in both public and private hospitals. Therefore, it appears to be highly significant for future investigation [25].

# The degree of satisfaction of the consumers with PHC emergency services

The 2016 study conducted by Mohey and Al Azmi in Alexandria, Egypt focused on Primary Healthcare Emergency Services. The study involved interviewing 768 individuals who had utilized these services, in order to assess their satisfaction levels figure 1.

AwadAllah, M. et al 3447 | Page



**Figure [1]:** Satisfaction level of patients attending PHC facilities in Alexandria by primary care emergency services [26]

The level of satisfaction a patient has with the medical care they received from their healthcare practitioner is known as patient satisfaction [27].

Patient satisfaction, a particular kind of customer satisfaction metric that is measured by self-report research, is utilized as a performance indicator when evaluating the quality of healthcare [28].

# Validity as a metric for evaluating health care quality

Despite its widespread usage, patient satisfaction may not always be a valid indicator of the quality of healthcare since patients may be dissatisfied with treatment that improves their health or satisfied with treatment that does not [29]. Numerous investigations have failed to find a link between patient satisfaction and the standard of care [30].

# **Factorsinfluencingpatientsatisfaction**

The primary determinant of patients'

satisfaction with a health care visit is:

Thedurationofcare, the effectiveness of the care, the degree to which the medical staff is communicative and empathic, the positive influence of a positive doctor-patient relationship. Additionally, individuals who are aware of the steps that must be taken during a clinical consultation. Individuals who have a higher level of patience and are aware of the estimated duration of a task tend to be more content, even if the waiting period is extended. Job satisfaction of the care-provider is another important aspect that affects patient satisfaction [31].

By 1998, the practice of quantifying and documenting patient satisfaction had become a well-established sector [32].

An issue with inquiring people about the quality of their care is that individuals often prioritize aesthetics above efficacy when evaluating healthcare. Consequently, satisfaction assessments may not accurately

AwadAllah, M. et al 3448 | Page

reflect the capacity of a hospital, doctor, or treatment to enhance their health. Research has shown that when patients are more satisfied with their healthcare experience, they tend to utilize emergency departments less frequently. However, they tend to use inpatient services more often, resulting in higher overall healthcare and prescription medication costs, as well as an increased risk of mortality [33].

Notwithstanding these difficulties, an increasing amount of research has confirmed that customer happiness is a legitimate and dependable indicator of customer behaviors and organizational effectiveness. There was a decrease in the amount of complaining about their primary care provider and a lower probability of ending the connection [34].

Within the realm of healthcare, contentment among patients can be comprehended as a multi-attribute model. where several components of care contribute to the overall level of satisfaction. Significantly, a decrease in performance on a characteristic leads to considerably greater discontent compared to the satisfaction provided by an increase in performance on the same characteristic. In essence, negative performance has a greater impact than positive performance. Therefore, in order to guarantee overall patient satisfaction, it is crucial to minimize poor performance in the patient-care aspect that is seen as the worst, rather than focusing on maximizing positive performance in another aspect. An effective approach could involve assessing patient discontentment rather than contentment [35].

### Effectofsatisfactiononutilization service

Patient satisfaction and resource use may be positively correlated. According to the research, hospitals that spend more per patient may receive higher ratings, which could make

hospitals that use more resources per patient more desirable to patients seeking healthcare [36].

According to recent research, a number of factors, including travel distance, gender, age, education level, and duration of hospital stay, may have an impact on patient satisfaction [37].

One study, using a nationwide dataset, indicated that increased patient satisfaction was linked to higher utilization of inpatient healthcare services and greater healthcare expenses [38].

Therefore, it is likely that placing a strong emphasis on patient experience scores could have a negative effect on the utilization of healthcare resources. Nevertheless, a favorable patient experience can also serve as a significant and separate aspect of quality for patients, and it can be associated with enhanced clinical results [39].

Patient satisfaction is likely influenced by their expectations. Physicians who fulfill patient requests in an outpatient context have been linked to favorable patient ratings of care. Nevertheless, patients seem to prioritize education, Making decisions together and choosing empathy from the provider above testing and action. Patients might require more resource investment as a substitute when the previous features are not available [39].

A study proposed that the correlation between the use of resources and patient satisfaction may be due to the perception that patients have. They believe that doctors who allow them to stay in the hospital for a longer period or conduct additional tests demonstrate a greater concern for their well-being. A result, these patients have greater faith that their doctors will listen to them and address their issues. Numerous studies that demonstrated a clear relationship between satisfying patients' expectations and their level of satisfaction with the care they received were uncovered through a thorough review of primary care patients. However, it was also observed that physicians often misinterpret patients' desire for information as an expectation for a specific course of action [40].

**Conflict of interest:** The authors declare no conflict of interest.

**Financial Disclosures:** This study was not supported by any source of finding.

**Sources of funding:** No specific grant was obtained for this research from governmental, private, or nonprofit funding organizations.

**Author contribution:** Authors contributed equally in the study.

# Acknowledgement

The authors would like to appreciate all the participants and the hospital stuff who contributed to this study.

## **Author contributions**

All the authors carried out this work. Zeinab Hamed Sawan, Marwa Bayomi AwadAllah Mohamed, Hanaa Salah Said designed and directed the study.

All authors were involved in drafting the article and revising it for important intellectual content and all authors read and approved the final version to be published.

# Availability of data

Data supporting the results of this article are included within article.

## References

- Kitsios F, Stefanakakis S, Kamariotou M, Dermentzoglou L. E-service Evaluation: User satisfaction measurement and implications in health sector. Computer Standards & Interfaces. 2019 Mar 1: 63:16-26.
- 2. **Ree E, Wiig S, Manser T, Storm M.** How patient involvement is measured in patient centeredness scales for health professionals? A systematic review

- of their measurement properties and content. BMC Health Services Res. 2019 Dec;19:1-3.
- 3. **Solberg BS, Haavik J, Halmøy A.** Health care services for adults with ADHD: patient satisfaction and the role of psycho-education. J Atten Disord. 2019 Jan; 23(1):99-108..
- 4. Borg S, Eeg-Olofsson K, Palaszewski B, Engström MS, Gerdtham UG, Gudbjörnsdottir S. Patient-reported outcome and experience measures for diabetes: development of scale models, differences between patient groups and relationships with cardiovascular and diabetes complication risk factors, in a combined registry and survey study in Sweden. BMJ open. 2019 Jan 1;9(1):e025033.
- Pakurár M, Haddad H, Nagy J, Popp J, Oláh J.
   The service quality dimensions that affect customer satisfaction in the Jordanian banking sector.
   Sustainability. 2019 Feb 20; 11(4):1113.
- 6. Woodburn JL, Staley LL, Wordingham SE, Spadafore J, Boldea E, Williamson S et al. Destination therapy: standardizing the role of palliative medicine and delineating the DT-LVAD journey. J Pain Symptom Manage. 2019 Feb 1;57(2):330-40.
- Luther L, Fukui S, Garabrant JM, Rollins AL, Morse G, Henry N et al. Measuring quality of care in community mental health: Validation of concordant clinician and client quality-of-care scales. J Behav Health Serv Res. 2019 Jan 15; 46:64-79.
- 8. **Jiang F, Rakofsky J, Zhou H, Hu L, Liu T, Wu S et al.** Satisfaction of psychiatric inpatients in China: clinical and institutional correlates in a national sample. BMC psychiatry. 2019 Dec; 19:1-1.
- 9. **O'Sullivan SB, Schmitz TJ, Fulk G.** Physical rehabilitation. FA Davis; 2019 Jan 25;111-27.
- 10. Lee TH, McGlynn EA, Safran DG. A framework for increasing trust between patients and the organizations that care for them. Jama. 2019 Feb 12; 321(6):539-40.
- 11. Wang X, Chen J, Burström B, Burström K.

- Exploring pathways to outpatients' satisfaction with health care in Chinese public hospitals in urban and rural areas using patient-reported experiences. Int J Equity Health. 2019 Dec; 18:1-3.
- 12. Espie CA, Emsley R, Kyle SD, Gordon C, Drake CL, Siriwardena AN et al. Effect of digital cognitive behavioral therapy for insomnia on health, psychological well-being, and sleep-related quality of life: a randomized clinical trial. JAMA psychiatry. 2019 Jan 1; 76(1):21-30.
- 13. Wasserman J, Palmer RC, Gomez MM, Berzon R, Ibrahim SA, Ayanian JZ. Advancing health services research to eliminate health care disparities. Am J Public Health. 2019 Jan; 109(S1):S64-9.
- 14. Wickman UL, Yngman-Uhlin P, Hjortswang H, Wenemark M, Stjernman H, Riegel B et al. Development of a self-care questionnaire for clinical assessment of self-care in patients with inflammatory bowel disease: A psychometric evaluation. Int J Nurs Stud. 2019 Jan 1; 89:1-7.
- 15. Hall E, Tam E, Liang M, Zhang Q, Liu L, Wong L et al. Development and prospective evaluation of CAPLET, a cancer ambulatory patient physical function longitudinal evaluation tool for routine clinical practice. Support Care Cancer. 2019 Feb; 27:521-30.
- Kotler P. Marketing Management: The Millennium Edition [10<sup>th</sup> ed.]. Prentice Hall International Inc (2000).
- 17. Kilpatrick K, Tchouaket É, Paquette L, Guillemette C, Jabbour M, Desmeules F et al. Measuring patient and family perceptions of team processes and outcomes in healthcare teams: questionnaire development and psychometric evaluation. BMC Health Serv Res. 2019 Dec; 19:1-6.
- 18. Merriam SB, Grenier RS, editors. Qualitative research in practice: Examples for discussion and analysis. John Wiley & Sons; 2019 Jan 14.
- Santana MJ, Ahmed S, Lorenzetti D, Jolley RJ,
   Manalili K, Zelinsky S et al. Measuring patient-

- centred system performance: a scoping review of patient-centred care quality indicators. BMJ open. 2019 Jan 1;9(1):e023596.
- 20. Black RE, Taylor CE, Arole S, Bang A, Bhutta ZA, Chowdhury AM et al. Comprehensive review of the evidence regarding the effectiveness of community—based primary health care in improving maternal, neonatal and child health: 8. summary and recommendations of the Expert Panel. J Glob Health. 2017 Jun;7(1).
- 21. Vandewalle J, Defour Y, Beeckman D, Deproost E, Van Hecke A, Verhaeghe S. The development and validation of a tool to measure the quality of contact between mental health nurses and patients who experience suicidal ideation. InCARE4 International Scientific Nursing and Midwifery Congress, third edition 2019; 155.
- 22. Diplock BD, McGarragle KM, Mueller WA, Haddad S, Ehrlich R, Yoon DH et al. The impact of automated screening with Edmonton Symptom Assessment System (ESAS) on health-related quality of life, supportive care needs, and patient satisfaction with care in 268 ambulatory cancer patients. Support Care Cancer. 2019 Jan; 27:209-18.
- 23. Mazurenko O, Richter J, Kazley AS, Ford E. Examination of the relationship between management and clinician perception of patient safety climate and patient satisfaction. Health care management review. 2019 Jan 1; 44(1):79-89.
- 24. Renggli S, Mayumana I, Mboya D, Charles C, Mshana C, Kessy F et al. Towards improved health service quality in Tanzania: appropriateness of an electronic tool to assess quality of primary healthcare. BMC Health Serv Res. 2019 Dec; 19:1-6.
- 25. Bhatt S, Boody BS, Savage JW, Hsu WK, Rothrock NE, Patel AA. Validation of patient-reported outcomes measurement information system computer adaptive tests in lumbar disk herniation surgery. JAAOS J Am Acad Orthop Surg. 2019 Feb 1; 27(3): 95-103.

AwadAllah, M. et al 3451 | Page

- 26. **Mohey A, Faris Al Azmi S.** Primary healthcare emergency services in Alexandria, Egypt 2016. Qual Prim Care. 2017; 25(5):303-15.
- 27. Charalambous M, Sisou G, Talias MA. Assessment of Patients' Satisfaction with Care Provided in Public and Private Hospitals of the Republic of Cyprus: A Comparative Study. Int J Caring Sci. 2018 Jan 1.
- 28. Rossi PH, Lipsey MW, Henry GT. Evaluation: A systematic approach. Sage publications; 2018 Dec 6.
- 29. **Andresen B.** Percutaneous pulmonary valve implantation impact on clinical outcome, patients self-reported health, psychosocial function, and hospital costs in patients with congenital heart disease. 2018; 51[4], 747-53.
- 30. Straus SE, Glasziou P, Richardson WS, Haynes RB. Evidence-based medicine E-book: How to practice and teach EBM. Elsevier Health Sciences; 2018; 17[4], 521–2.
- 31. **McGill S.** Low back disorders: evidence-based prevention and rehabilitation. Human Kinetics; 2015 Nov 17.
- 32. von Kodolitsch Y, Rybczynski M, Vogler M, Mir TS, Schüler H, Kutsche K et al. The role of the multidisciplinary health care team in the management of patients with Marfan syndrome. J Multidiscip Healthc. 2016 Nov 3:587-614.
- 33. **Townsend MC, Morgan KI.** Psychiatric mental health nursing: psychiatric-mental-health-nursing-concepts of- care in evidence-based-practice 9<sup>th</sup>

- edition ebook, 2017; 195, 215.
- 34. **Millenson ML.** Demanding medical excellence: Doctors and accountability in the information age. University of Chicago Press; 2018 Jun 1.
- 35. Norberg BG, Nyström M, Christensson L, Herlitz J, Wireklint Sundström B. Trust in the early chain of healthcare: lifeworld hermeneutics from the patient's perspective. Int J Qual Stud Health Well-being. 2017 Jan 1;12(1):1356674.
- 36. **Badinski I, Finkelstein A, Gentzkow M, Hull P.**Geographic variation in healthcare utilization: The role of physicians. National Bureau of Economic Research; 2023 Oct 9.
- 37. Abtahi AM, Presson AP, Zhang C, Saltzman CL, Tyser AR. Association between orthopaedic outpatient satisfaction and non-modifiable patient factors. JBJS. 2015 Jul 1;97(13):1041-8.
- 38. **Fenton JJ, Jerant AF, Bertakis KD, Franks P.**The cost of satisfaction: a national study of patient satisfaction, health care utilization, expenditures, and mortality. Arch Intern Med. 2012 Mar 12; 172(5):405-11.
- 39. Ramanayake RB, Ranasingha S, Lakmini S. Management of Emergencies in General Practice: Role of General Practitioners. J Family Med Prim Care. 2014; 3(4): 305–8.
- 40. Rao JK, Weinberger M, Kroenke K. Visit-specific expectations and patient-centered outcomes: a literature review. Arch Fam Med. 2000 Nov 1;9(10):1148.

# **Citation:**

AwadAllah Mohamed, M., Sawan, Z., Mohamed Mohamed, A., Said, H. Customer Satisfaction and Utilization of Emergency Services. *Zagazig University Medical Journal*, 2024; (3444-3452):.doi: 10.21608/ zumj.2024. 304433.3474

AwadAllah, M. et al 3452 | Page