

DEVELOPING STEPS TO IMPROVE ADHERENCE IN HEALTHCARE PROFESSIONALS DAILY PRACTICE

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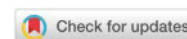
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Abstract: Adherence is a term that has been prominently used and emphasized recently, representing the connection between a patient and their treatment. Medical adherence has its hierarchical structure, with roots primarily stemming from legislative bodies to the healthcare system, institutions and ultimately healthcare professionals (doctors, nurses, technicians). However, medical adherence faces a significant obstacle in achieving therapy goals and improving treatment outcomes among many patients, especially those with chronic conditions. Social and societal conditions, as well as the state organization in Bosnia and Herzegovina (BiH), greatly influence the healthcare system and the purchasing power of healthcare service users. Due to significant barriers and challenges regarding adherence, efforts are being made to maintain a system that supports increasing patient adherence levels. Within this research paper, three questionable theses are presented: internal and external education, improvement of the healthcare system and the implementation of systematic data collection on patient adherence. All three questionable thesis received positive feedback from respondents (200 participants). From the first thesis, 154 respondents voted in favor, for the second thesis, 142 respondents and for the third thesis, 134 respondents agreed with the proposed suggestions. Unfortunately, in BiH insufficient attention is given to patient adherence and there is no unified strategy to increase adherence levels. Internal and external education would be essential as healthcare workers are not adequately trained, nor are conditions created for its implementation. Increasing the level of adherence can greatly benefit healthcare workers in their daily practice if they have adequate conditions in place. Unfortunately, a significant number of healthcare employees lack the knowledge, experience and a clearly defined strategy on how to increase patient adherence. The complexity of measuring adherence only adds to the intricacy of an already complex problem and the inefficiency and sluggishness of the healthcare system hinder the creation of appropriate activities that should result in increased patient adherence. The patient's adherence is influenced by numerous factors for which there is no unique solution or overcoming suggestions. Also, problems in the process of identifying and measuring adherence further complicate the already complex matter and the process of increasing user adherence. Creating a strategy to improve adherence at the state level in Bosnia and Herzegovina is almost impossible; therefore, the increase in adherence can only be achieved at the level of the patient, healthcare personnel and ideally, at the level of healthcare institutions. Unfortunately, in most cases, conditions and workload do not allow healthcare workers to spend enough time with patients, establish adequate communication and demonstrate that the patient is genuinely important to them. Providing not only the necessary care but also essential information about the illness and treatment can directly impact the level of patient adherence. The healthcare system in developed countries, although technologically possible, lacks an adequate mechanism for collecting, processing and analyzing data related to the adherence level of patients with a specific condition or in a particular geographic region. Data is often collected based on indirect methods that do not provide accurate and precise information, posing a significant challenge in proving the role and importance of medical adherence in the healthcare system and treatment outcomes. Considering that the adherence level ranges from 43% to 78%, which is too high for certain treatment regimens, legislative reforms are needed. In addition to the law and its governing body, it is necessary to ensure all essential materials, from medications to specific medical supplies are provided to all healthcare institutions, hospitals and healthcare centres. Both internal and external education are crucial for patient treatment and therefore it should be implemented and carried out on a monthly basis. In addition to healthcare professionals, the education of patients with medical conditions is essential, considering they can be divided into those who are not familiar with using modern technologies to educate themselves and understand the role and significance of medical adherence. Moreover, there are patients who are adept at using modern technology to research their condition and treatment options, but they lack sufficient knowledge and information to assess the accuracy of the available data.

Keywords: adherence, level, education, healthcare, strategy, patients

Field: Pharmacoeconomics, Pharmacy

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1. INTRODUCTION

Adherence represents the link between the patient and the healthcare worker, where the patient follows instructions and recommendations from the medical professional. Adherence not only encompasses adherence to lifestyle and prescribed medication frequency but also compliance with prescribed diet, lifestyle changes, regular doctor visits to prevent disease progression, and improvement of the patient's treatment (Shahin et al., 2019; Panahi et al., 2022). Furthermore, adherence is crucial in achieving positive therapeutic outcomes, as even the best therapy and treatment can go unnoticed if the patient does not adhere to it (Gutierrez-Crespo et al., 2023). Adherence is not solely tied to healthcare workers; it is significantly connected to the healthcare system, organizations and recommendations defined by the healthcare facility management. Steps to improve adherence include better patient dedication, increased effectiveness and improved communication between healthcare workers and patients. Additionally, the healthcare system defines the amount of fees and in this regard, there are fewer services that are free of charge, reducing fees is crucial financial support for the patients themselves (Walsh et al., 2019; Wilhelmsen and Eriksson, 2019). The continuity of patient treatment and visits is defined by the healthcare body. Better adherence occurs when a patient has one doctor overseeing their condition and one healthcare institution where their treatment takes place. Improved accessibility, information flow and direct exchange of information primarily among healthcare organizations, systems, pharmacy institutions and workers are crucial for enhancing adherence (Spinelli et al., 2020; Krousel-Wood et al., 2021). The dimensions and levels of adherence aimed at improvement are directly influenced by the healthcare system and healthcare institutions which directly impact patients. However, healthcare institutions are not independent, they significantly depend on funding sources, economic conditions and the political situation in the country.

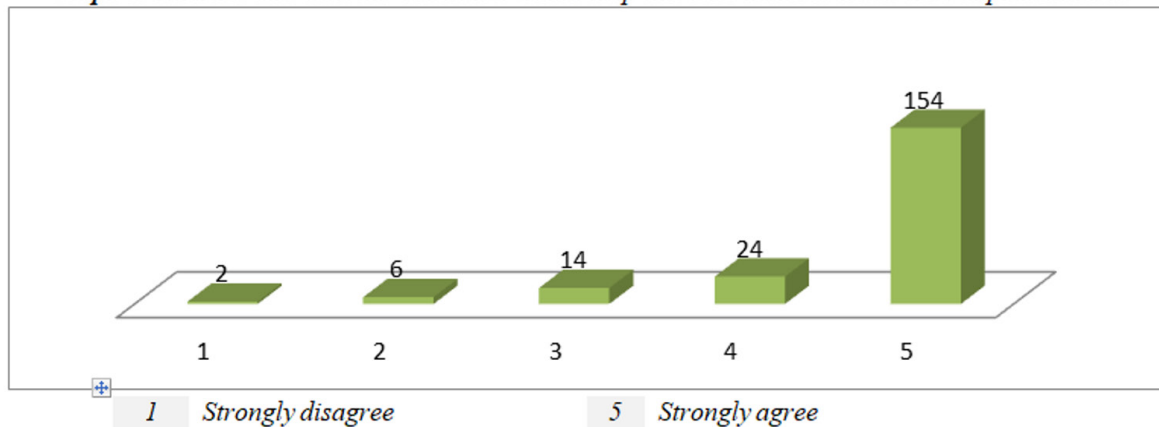
2. MATERIAL AND METHODS

The research was conducted over a period of 3 months, from February to April 2023, with a total of 200 participants. It was carried out using an online survey (Google Forms). The survey was anonymous nature and consisted multiple questionnaires presented as hypothetical propositions aimed at facilitating steps to enhance the level of medical adherence. The study was conducted in accordance with the Convention on Human Rights and local patient rights laws, which included: the Law on the Rights, Obligations and Responsibilities of Patients in the Federation of Bosnia and Herzegovina, the Law on Personal Data Protection in Bosnia and Herzegovina and the Regulation on regulations regarding records in the field of healthcare in the Federation of Bosnia and Herzegovina.

3. RESULTS

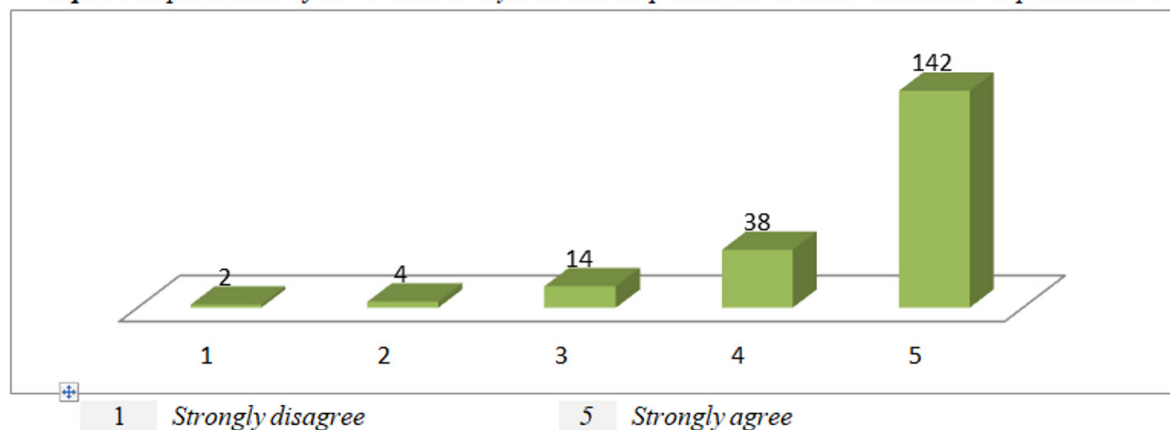
Within the framework of Graph 1. the results for the implementation of better internal and external education to enhance medical adherence within the organizational structure of a healthcare institution in the country Bosnia and Herzegovina are presented. The provided responses to the given question were: Strongly disagree, Partially disagree, Partially agree, Agree, Strongly agree. The number of participants in this survey was 200, with 80 male participants and 140 female participants. The results indicate the following: the majority of participants (154) believe that internal and external education would indeed help enhance medical adherence, while a very small portion of participants (2) disagrees with this statement. It has been observed that healthcare workers are not adequately educated about the role and significance of adherence in treatment outcomes. Clear and precise instructions/knowledge about the practical application of medical adherence in the daily work of healthcare workers are lacking.

Graph 1. Internal and external education would help increase medical adherence implementation



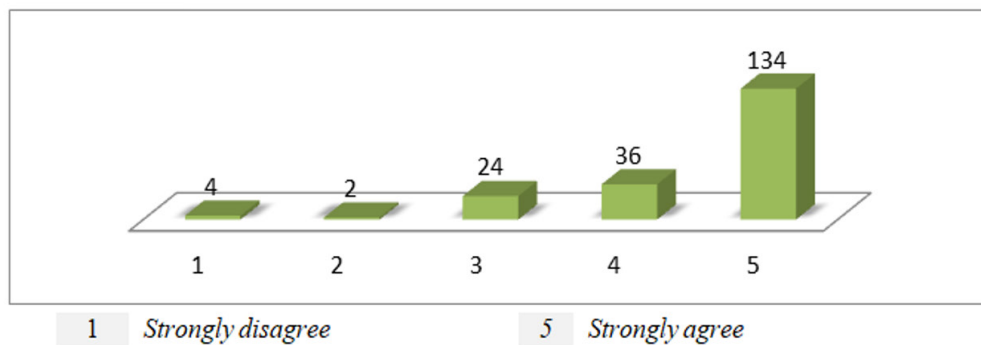
Furthermore, within Graph 2. we observe similar regarding the thesis that improving the healthcare system can help increase medical adherence. The majority of respondents (142), accounting for 71% proportionally, agree with the posed thesis that enhancing the healthcare system can assist in enhancing medical adherence, while the smallest number of participants (2), constituting 1% proportionally disagree with the stated thesis. Unfortunately, medical adherence has not been integrated into the field, primarily in the educational system, nor within healthcare institutions. Educational institutions that train future medical professionals should enhance their curriculum. Moreover, the education of future professionals should encompass both theoretical aspects and practical applications relevant to the existing healthcare system, ensuring that healthcare units are not compromised in terms of medical adherence.

Graph 2. Improvement of the healthcare system can help increase medical adherence implementation



Additionally, within Graph 3. the results for increasing the level of medical adherence implementation due to the application of a systemic approach to collecting patient adherence data are presented. Similar to the previous theses, this one also received positive feedback, where, among other things, 134 respondents or 67% proportionally, agreed on the application of a systemic approach to collecting patient adherence data, while the smallest number of participants (4) disagreed with the given thesis. A systemic approach to data collection enables the creation of a unified database from which relevant indicators and data necessary for decision-making and activities/strategies can be obtained. It is essential to establish a system in which healthcare workers can dedicate more time to patients during the provision of healthcare services. In these visits, healthcare professionals should have an adequate system, knowledge and resources for the implementation of medical adherence.

Graph 3. Systemic approach to collecting patient adherence data will increase the level of medical adherence implementation



4. DISCUSSION

Medical adherence represents a crucial and significant aspect of providing healthcare and improving the efficiency and effectiveness of treatment outcomes. It is not limited solely to the healthcare system but also involves its various components such as medical staff (doctors, nurses, technicians), administrative entities and healthcare institution management. Considering that medical adherence is poorly positioned within the healthcare institutions of Bosnia and Herzegovina, a consensus among 80% of the participants (200 respondents in total) led to the formulation of several steps to enhance it. Enhancing medical adherence involves improving both internal and external education, enhancing the educational system, as well as adopting a systematic approach to collecting data on patient adherence, a viewpoint agreed upon by approximately 80% of the respondents.

In the literature, similar conclusions are drawn, where Gast and Mathes (2019) also emphasize the importance of educational strategies (internal and external) in enhancing medical adherence. They recommend providing patients or caregivers with training about the patient's condition, their medications, how to take them or the health condition for which the medication is prescribed. Moreover, these educational sessions would offer healthcare professionals guidance on how patients should handle issued doses and provide additional education to patients who may lack a sufficient understanding of their condition. Delivering educational content on the consequences of non-compliance with therapy and the therapeutic benefits of effective adherence helps the patient comprehend the need for proper adherence, providing them with essential knowledge to establish motivation for compliance.

The improvement of the educational system aimed at enhancing medical adherence is discussed by Fernando-Lazaro et al. (2019), who argue that the healthcare system plays a vital role in providing services that include recommendations focused on changing aspects of the interaction between healthcare providers and patients. The healthcare system should provide recommendations to enhance the relationship between patients and service providers, improve communication between patients and providers or in any way enhance the ability of healthcare providers to address patients needs and concerns. The most common recommendations from the healthcare system in this category were involving patients in treatment decisions and improving the therapeutic relationship.

A systematic approach to collecting data on patient adherence would enhance the level of medical adherence, as discussed by Anghel et al. (2019), who believe that this approach could provide insights into patients adherence of non-adherence to therapy. Additionally, it could monitor their health status, introduce new monitoring methods, as well as new, more suitable therapies patients could easily monitor and apply.

5. CONCLUSION

Medical adherence is crucial for all participants in healthcare provision. Adherence can be defined as the „degree to which a patient follows the advice given by healthcare providers“. Several factors influence the level of adherence, including the condition within healthcare institutions, healthcare organizations, hospitals and health centres. This study emphasizes internal and external education (supported by 154 respondents), which involves continuous training of medical staff within healthcare institutions. This approach includes dedicating more time to patients, providing psychological support, understanding

and prediction and finding ways to enhance patient motivation for medical adherence. Another aspect of improving adherence involves enhancing the healthcare system (endorsed by 142 respondents). This includes changing aspects that have not proven effective in communication between patients and medical staff, reducing fees, increasing medical equipment and necessary supplies for better healthcare services and creating curricula for medical staff to improve communication with both patients and healthcare institutions. The third aspect involves establishing a systematic monitoring system for collecting data on patient adherence (supported by 134 respondents). This proposition leans towards enhancing the second aspect, both are interrelated. Monitoring patient adherence data would significantly contribute to their better treatment and provide doctors with insights into their condition. It would essentially reveal whether the therapy is being skipped or if it genuinely isn't suitable for the patient. All three proposed theses or steps to improve adherence, received positive feedback from 200 respondents. The conclusion drawn is that medical adherence is indeed at a very low level within healthcare institutions in Bosnia and Herzegovina. Therefore, there is a need to emphasize and invest significantly more in its improvement.

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