



University Goce Delcev - Stip

KNOWLEDGE ABOUT MEDICATION ADHERENCE AMONG PHARMACY STUDENTS IN KOSOVO



ALMA MATER EUROPAEA

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Introduction

Medication adherence may be defined as the extent to which a patient acts in accordance with the prescribed medications dose, interval, and a dosing regimen. Medication adherence is not exclusively the responsibility of the patient, but health professionals are involved also. Increasing adherence may have a greater effect on health than improvements in specific medical therapy alone.

Approximately 50% of patients do not take medications as prescribed!



Aim

The aim of this study was to evaluate knowledge about medication adherence among pharmacy students in Kosovo, and as a goal, inform the students about its importance, role of pharmacists, benefits of adhering to medication, strategies to improve medication adherence, etc.

Objectives

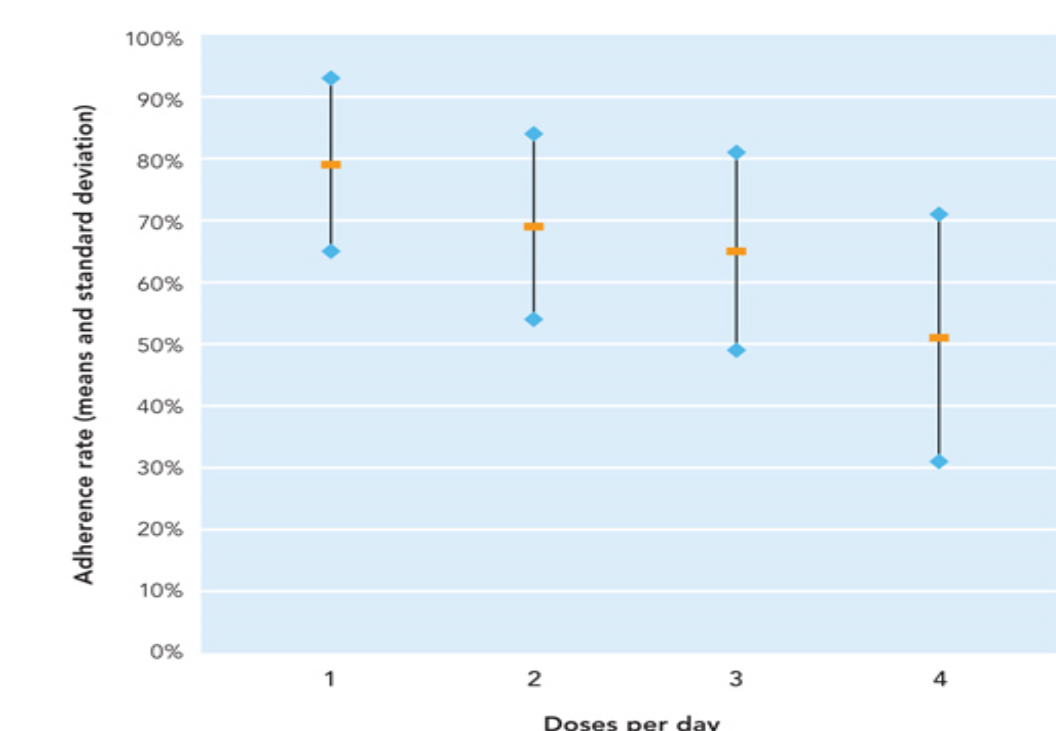
- Describe the continuum adherence to nonadherence of medication usage
- Analyze the current evidence surrounding significance of non-adherence and barriers to adherence
- Identify practical interventions provider and patients may apply to improve medication adherence

Method

Medication Adherence can be measured by several methods, including:

- Self-report questionnaires or structured interviews,
- Therapeutic drug monitoring (TDM),
- Electronic devices and
- Pick-up/refill rates.

This is a study based on data obtained from a questionnaire conducted among 25 Pharmacy students in Pristina, Kosovo during the May, 2023. The questionnaire includes a combination of 12 questions containing qualitative and quantitative data. In this questionnaire we used two types of questions: 1) with multiple choices and 2) open questions.



BURDEN'S IMPACT ON MEDICATION ADHERENCE

Adherence Decreases as the number of doses per day increases

Burden's impact on medication adherence - Kristen Engelen, 2021.

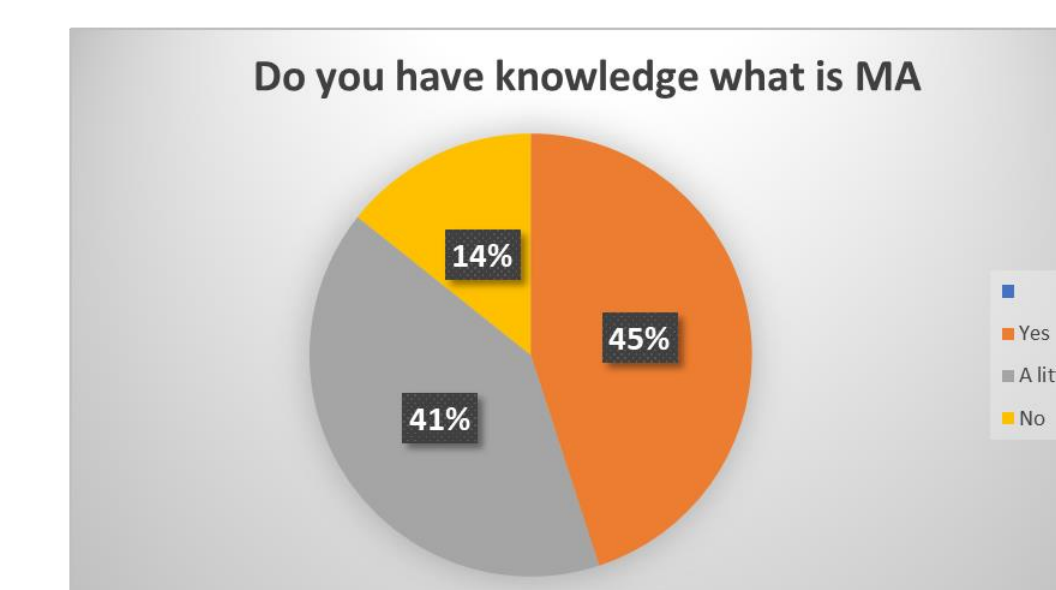
Adherence	Nonadherence
<ul style="list-style-type: none"> • Health outcomes • Decrease healthcare costs • Increase quality of life • Decreased risk of adverse events • Disease control 	<ul style="list-style-type: none"> • Worsening health outcomes • Increased healthcare costs • Decreased quality of life • Increased risk of adverse events

COMPARISON OF ADHERENCE AND NONADHERENCE

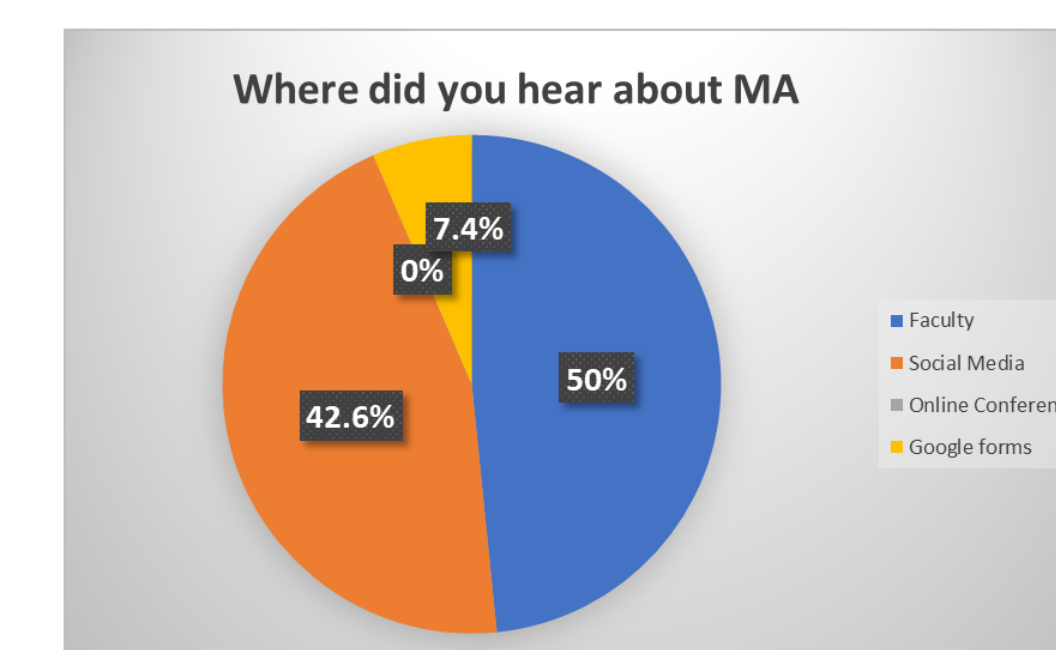
The American Medical Association says, "A patient is considered adherent if they take 80% of their prescribed medicine(s). If patients take less than 80% of their prescribed medication(s), they are considered nonadherent."

Results

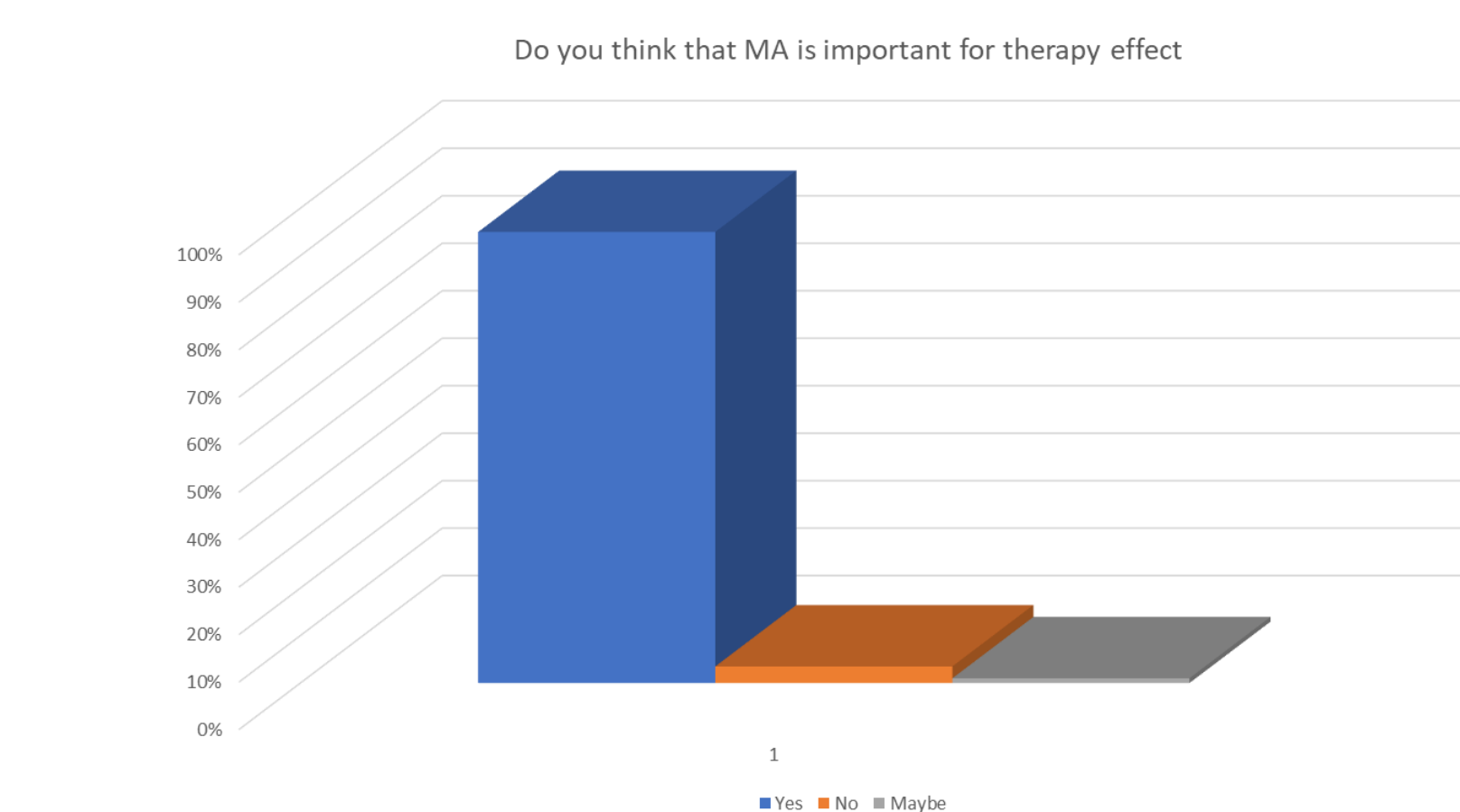
The obtained results show that 45% of participating students have knowledge about medication adherence, where 50% of the students learned about it at the faculty. 95% of the students think that medication adherence is important for the resulting therapy effect. Preliminary data from our still ongoing study among the student population in Kosovo, indicates low to moderate medication adherence knowledge, and that more in-depth strategies are needed to make the medication adherence approach more familiar to pharmacy students.



In the graph we have the knowledge regarding the medication adherence in the Pharmacy students



In the graph we show the percentage where the Pharmacy students have heard about the Medication adherence



This chart shows how is important the Medication Adherence for the therapy effect

Discussion

Improved health outcomes:

- **Reduced healthcare costs:** Adherence to medical regimens can reduce the need for hospitalization, emergency room visits, and other medical interventions, leading to cost savings for both patients and healthcare systems (Andrade et al., 2019).
- **Improved quality of life:** Adherence to medical regimens can lead to better physical and mental health, and improved ability to perform daily activities (Simons et al., 2019).
- **Decreased risk of medication-related adverse events:** Taking medications as prescribed and following other medical recommendations can reduce the risk of adverse reactions, drug interactions, and other medication-related issues (Faria et al., 2018).
- **Better disease control:** Adherence to medical regimens can help keep chronic conditions under control, prevent complications, and reduce the risk of disease progression (Liu et al., 2018).

Conclusion

In conclusion, information's and knowledge must be increased also in the Pharmaceutical community, to obtain increased knowledge among patients to succeed in achieving good and persistence medication adherence.

- Medication adherence can have a tremendous impact on quality and length of life, health outcomes, and overall healthcare costs.
- Engaging patients and the healthcare team is essential to success in achieving medication adherence and persistence.
- Notable interventions include face-to-face counselling, electronic reminders, regimen simplification, adherence packaging, minimizing adverse effects, 90-day supplies, automatic refills, providing incentives or cost savings, and maintaining ongoing communication.
- Ultimately, pharmacists' efforts to improve adherence can positively impact patient care and generate substantial clinical and financial rewards.