

DRUG MISUSE AMONG YOUTH IN THE ERA OF ARTIFICIAL INTELLIGENCE

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Abstract

The use of artificial intelligence (AI) tools and online health information has increasingly influenced how young people access and interpret medical knowledge, contributing to a tendency toward self-medication. This study aimed to evaluate drug use patterns among young people and the influence of AI and digital resources on medication-related decisions. A descriptive study was conducted using an anonymous questionnaire with 54 participants, assessing over-the-counter drug use, types of medications, responses to symptoms, and use and trust of AI and online information. Most participants were female and aged 19–26 years. The majority reported rare use of over-the-counter drugs, with analgesics being the most commonly used medications. In response to new symptoms, most participants consulted a physician, while fewer relied on AI tools, online sources, pharmacists, or self-medication. Trust in AI and internet-based health information was generally moderate to low. Physicians remained the primary influence in medication decisions. Although self-medication was present, professional medical advice was still the dominant approach. AI and online resources were mainly used as supportive tools rather than primary decision-making sources. The findings suggest that while digital technologies are becoming part of health information seeking, their impact on drug use behavior remains limited. These results highlight the need for improved health education and responsible use of medications in the digital age.

Keywords: Self-medication, artificial intelligence, drug use, online health information, medication safety.

Introduction

The increasing use of artificial intelligence (AI) tools and online health information has significantly changed how young people access and interpret medical knowledge. This shift has contributed to a growing tendency toward self-medication and the use of drugs without professional consultation. Although digital platforms may improve access to health-related information and support awareness, concerns remain regarding the accuracy and reliability of such content and its influence on safe medication practices. In this context, understanding how young individuals use AI and online resources in relation to drug consumption is important. Therefore, this study aims to evaluate drug use patterns among youth and assess the influence of digital information sources on their medication-related decision-making.

Aim

To evaluate drug use patterns among young people and the influence of artificial intelligence (AI) and online resources on their medication-related decisions.

Materials and Methods

A descriptive study was conducted using an anonymous questionnaire with 54 participants. The questionnaire included questions on over-the-counter drug use, types of medications used, response to symptoms, and the use and trust of AI and online health information.

Results

A total of 54 participants were included in the study. The age distribution showed that 18 participants were aged 19–22 years, 18 were 23–26 years, 11 were 27 years and older, and 7 were 15–18 years. Regarding gender, 37 participants were female and 17 were male.

In terms of self-reported use of over-the-counter (OTC) medications, 29 participants stated that they used them rarely, 17 reported occasional use, 6 reported never using OTC medications, and 2 reported frequent use. Regarding the types of medications used, analgesics were the most commonly reported (41 participants), followed by antibiotics (7 participants), dietary supplements (7 participants), and medications for sleep or anxiety (4 participants). A small number of respondents also reported the use of specific pharmaceutical products such as proton pump inhibitors (PPIs) and other individual preparations.

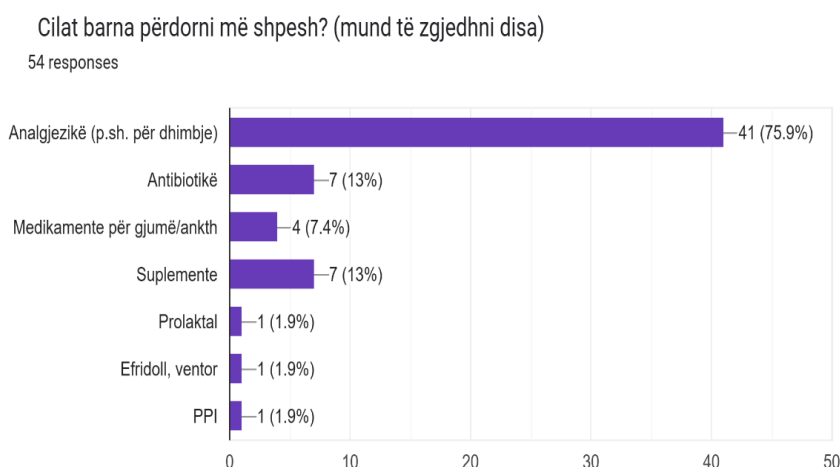
When experiencing new symptoms, 35 participants reported consulting a physician as their first step. In contrast, 12 participants reported using artificial intelligence (AI) tools or online sources to seek health-related information, 5 consulted a pharmacist, and 2 reported taking medication immediately without prior consultation.

Regarding the use of AI and internet sources prior to medication use, 18 participants reported that they never seek such information, 16 stated they do so rarely, 14 reported frequent use, and 6 reported always relying on these sources. Trust in AI and online health information was generally moderate in 30 participants, low in 19, and high in 5.

In relation to self-medication awareness, 25 participants considered self-medication to be risky, 21 were uncertain, and 8 did not consider it risky. Knowledge of drug side effects was reported as complete by 28 participants, partial by 22, and absent by 4.

Finally, regarding factors influencing medication-related decision-making, 45 participants indicated that physicians were the main influence. A smaller proportion reported influence from the internet, family, or pharmacists. When asked about potential behavioral change after completing the questionnaire, 22 participants stated they would not change their behavior, 20 were uncertain, and 12 indicated possible future changes in medication use practices.

Table Figures and Equations



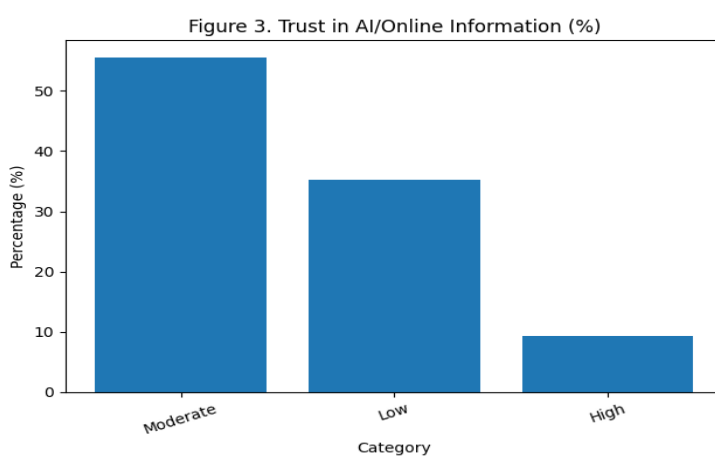
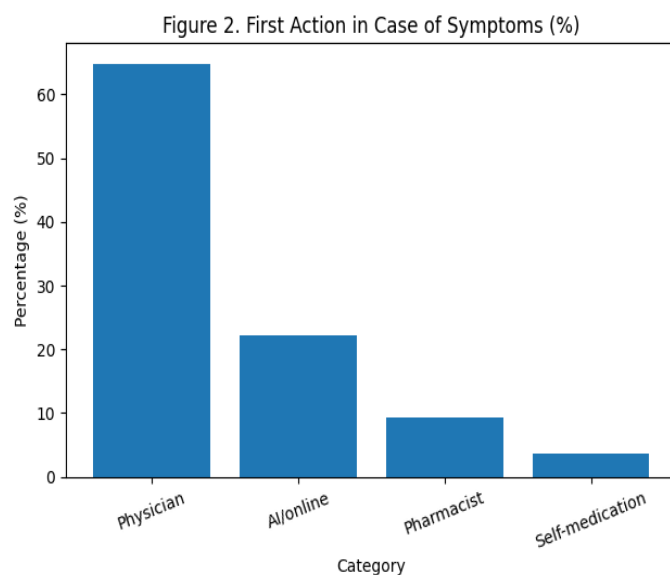
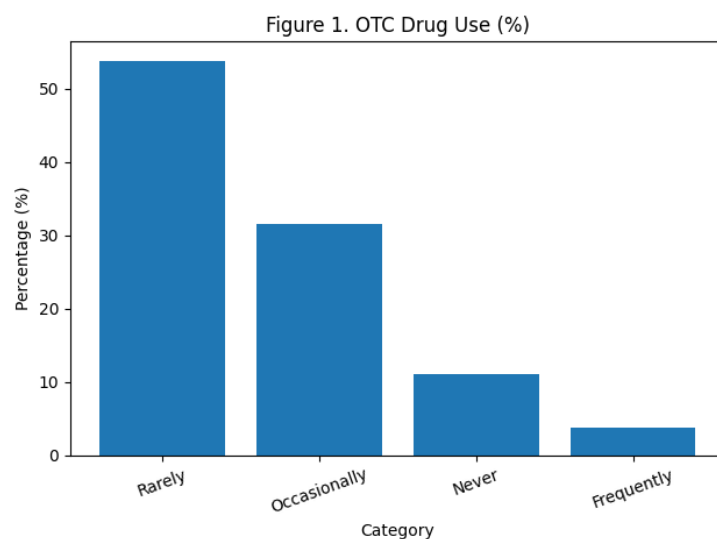


Figure 1.2.3 Publication of author

Conclusions

The findings of this study demonstrate that self-medication remains a relevant behavior among young people, despite the predominant reliance on healthcare professionals for decision-making. While artificial intelligence and online health resources are increasingly used, their role remains mainly supportive rather than decisive. These results suggest that, although digital technologies are shaping health information-seeking behaviors, concerns regarding the reliability of such sources persist. Therefore, strengthening health education and promoting responsible use of medications are essential to ensure safe practices among youth. Future efforts should focus on improving digital health literacy and guiding young individuals toward critically evaluating online medical information.

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