## RESEARCH ARTICLE

# The Relationship Level of Self-Medication Knowledge with Rationality of Drug Use in Adolescents

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#### Abstract

Currently, self-medication in Indonesian adolescents has a high prevalence. The problem with self-medication is the accuracy of drug use in adolescents, resulting in irrational treatment. The purpose of this study was to analyze the relationship between the level of knowledge of self-medication and the rational use of gastritis drugs in adolescents. This observational study has a cross-sectional design and a sample size of 91 students. The research was conducted from April to June 2021 in Jakarta. The nonrandom sampling method was used for the selection of research samples. Research data were obtained through interviews and questionnaires. Calculate the sample size using the infinite and finite population formula with a prevalence of 23.8. Inclusion criteria subjects aged 15–19 years who had complaints in the upper gastrointestinal tract and signed informed consent. Exclusion criteria are students taking gastritis treatment based on prescriptions from doctors or according to doctor's recommendations. Data analysis using SPSS 23.0 and correlation test using the chi-square test with a significance value of p<0.05. The results showed that 33% of respondents had good self-medication knowledge, and as many as 60% had irrational gastritis treatment behavior. The results of bivariate analysis obtained there is a significant relationship between the level of knowledge of self-medication and the rational treatment of gastritis with a value of p=0.000 (p<0.05). This study concludes that there is a relationship between knowledge of self-medication and the rational use of drugs..

**Keywords:** Adolescents, medicine, rationality, self-medication

### Introduction

Self-medication is an attempt by someone to treat themselves without a prescription from a doctor.<sup>1</sup> Based on the 2017-2019 national socioeconomic survey by the Statistics Indonesia, it was found that there was an increase in the average number of self-medications in Indonesia every year. In 2017, the number of people practicing selfmedication was 69.43%; in 2018, it was 70.74%; and in 2019, it was 71.46%, with an average increase of 1% each year.2 Gastritis (stomach inflammation) is a health problem in the digestive system with a high incidence rate. According to the 2018 Health Profile, gastritis is among the top 10 diseases of hospitalizations in Indonesia with 30,154 cases (4.9%). The incidence of gastritis is relatively high, with a prevalence of 274,396 cases in 258,704,900 people.3 The study by Tauran and Lameky4 showed a relationship between diet and the incidence and recurrence of gastritis.

Previous studies obtained the results of several types of over-the-counter drugs often used for gastritis self-medication, including antacids, histamine two receptor antagonists, proton pump inhibitors, and sucralfate.<sup>5</sup>

Several factors, including commercial marketing of drugs, treatment experience, conditions, economic social conditions. conditions, psychological education, educational history, influence the choice of selfmedication. Various problems often arise in the implementation of self-medication, such as a lack of understanding and knowledge about the proper and rational use of a drug, excessive use of drugs, and lack of knowledge about proper storage and disposal of drugs.6 According to data from Statistics Indonesia in 2019, 73.63% of selfmedication practitioners belonged to adolescents aged 15-19 years; this figure exceeded the average number of self-medication practitioners in Indonesia, 71.46%.2 Adolescence is a transitional

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