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Knowledge Levels and Paracetamol Self-Medication

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ABSTRACT

Background: *Our society used self-medication as a majority effort to overcome health issued. Based on Social Economic National Survey (2011), Statistic Center Agency recorded that 66 % of the ill persons in Indonesia used self-medication, this number is a lot higher compared with the percentage society which taking outpatient medical (44 %).* ***Objective:*** *To correlate between knowledge and paracetamol self-medication.* ***Method:*** *This research using analytical observation method with cross-sectional study approach, to determine the effect and knowledge level correlation toward self-medication behavior of Paracetamol medicine.* ***Results:*** *There is an influence of knowledge on self medication behavior shown by r value counted outnumber than r table such as 0,301 > 0,213, also the significantly value 0,006, R square 0,130, regression equality Y= 1.289X-1.815, 70% having better knowledge and 53% with positive action.* ***Conclusion:*** *The presence an influence of knowledge level correlation toward self-medication of Paracetamol drug onto Medical student, University of Muhammadiyah Malang.*
Keywords: Knowledge, Paracetamol, Self-Medication

INTRODUCTION

Self-medication is one of the effort of choosing and using modern medicine, herb, and even traditional medicine by individual to overcome the disease or any symptom (World Health Organization. 1998). Self-medication able to be simply translated as someone effort to medicate themselves (Kartajaya et al. 2011). Self-medication prevalently higher in urban city for 32,5% compared than 81,5% in rural area (Pandya et al. 2013). Research shows that the most by means of medicine in self-medication are paracetamol 38,2%, NSAID 29,1%, Antibiotic 16,9%, herbs 6,7%, other medicine 9,1% (Tarazi et al. 2016). The paracetamol consumption safely inclined according with its measurement and hepatotoxic will occur on overdose more than 4 g (Larson et al. 2005). Food and Drug Administration (FDA), USA recorded for 307 hepatotoxic case that connected with paracetamol consumption from January 1998 until 2001. There are 60% suffering hepatotoxic disease categorized as critical hepatitis patient, whereas 40% sufferer passed away. The reaction on skin and other hypersensitivity reported ever happen eventhought rarely occur (AHFS 2005). Acetaminophen is active metabolic from phenacetin and responsible for analgesic effect having lower COX-1 and COX-2 inhibitor of peripheral tissue and having non anti-inflamation with significant effect. Latest evidence indicate that acetaminophen able to obstruct third enzyme, COX-3, in the central

nervous system. COX-3 appear to be connected with variety product from COX-1 gen (Katzung 2007).

METHOD

This research is analytical observation method with *cross-sectional* study approach, which correlated variable data union gathered in the same time (Notoatmodjo 2005). *Sampling* technique in this research using *non-probability sampling (purposive sampling).* Population in this research are all of the Medical students, University of Muhammadiyah Malang (including Medic, Pharmacy, Nursing, and Physioterapy). The gathered sample are 87 students whom using paracetamol medicine for self-medication and comply for the inclusive criteria.

RESULT AND DISCUSSION

Research data established from questionnaire result that spread up since January until February 2017 and obtained 87 questionnaire that comply for the inclusive criteria. The respondent characteristic frequency distribution based on their major indicate the result for Medic students 21 (24%), Pharmacy students 35 (40%), Nursing students 18 (21%), and Physioterapy students 13 (15%). The respondent characteristic frequency distribution based on the place they buy paracetamol 78 (90%) from pharmacy. Furthermore from those questionnaire arranged the recapitulation of knowledge level toward self-medication of Paracetamol medicine onto Medical student, University of Muhammadiyah Malang. The Research resulted that students with Better knowledge are 61 person (70%), students with Average knowledge are 23 person (26%), with Lower knowledge are 3 person (3%), and there are none with Worst knowledge (0%). When this acceptance new behavior or adopted behavior trough process based on knowledge, awareness and positive manner, consequently those behavior will last longer (Notoatmodjo 2003). Students with positive manner (Rational Paracetamol Medicine Use) as much as 46 person (53%) and students with negative manner (Irrational Paracetamol Medicine Use) as 41 person (47%). Self-medication behavior influenced by many factors, some of them are their knowledge level, experience, manners in dealing with health issued (doctor minded), demography and epidemiology, available health care service, available medicine product without prescription, and social economy factors (Holt & Hall 1990).

Spearman test result in knowledge level correlation toward self-medication of Paracetamol medicine onto Medical student, University of Muhammadiyah Malang shows that r value counted outnumber than r table such as 0,301 > 0,213. Positive correlation coefficient indicate that there are positive knowledge level correlation toward self-medication. Better knowledge level about self-medication of Paracetamol medicine therefore with more positive manner of Rational Paracetamol Medicine Use onto Medical student, University of Muhammadiyah Malang. The significantly value 0.006<0.05 so H_0 denied H_1 accepted which means there is a presence of effect and knowledge level correlation toward self-medication of Paracetamol medicine onto Medical student, University of Muhammadiyah Malang. R *square* value or Determination Coefficient with 0.130 value. R *square* value indicate that knowledge influenced 13% toward rational paracetamol medicine in self-medication, whereas 87% influenced by other factors outside the free variable. Equality regression model that resulted is Y= -1.815+1.289x which means rational paracetamol medicine use in self-medication by medical students (y) will increase until 1.289 squad for each increasing knowledge level (x). In other words, if medical students knowledge have increased 1 squad therefore rational paracetamol

medicine use in self-medication toward Medical student, University of Muhammadiyah Malang will increased in 1.289 squad.

CONCLUSION

The presence an influence of knowledge level correlation toward self-medication of Paracetamol drug onto Medical student, University of Muhammadiyah Malang. Students with Better knowledge are 61 person (70%), students with Average knowledge are 23 person (26%), with Lower knowledge are 3 person (3%). Students with positive manner (Rational Paracetamol Medicine Use) as much as 46 person (53%) and students with negative manner (Irrational Paracetamol Medicine Use) as 41 person (47%).

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