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Research Article

Knowledge, Attitude and Practice on OTC Drugs

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ABSTRACT

A prospective interventional KAP (Knowledge, Attitude, and Practice) study was performed to evaluate the knowledge, attitudes, and practices regarding over-thecounter (OTC) drugs among non-healthcare students at Sandip Foundation. The study aimed to enhance students' decision-making and address common misconceptions about OTC drugs. The research enrolled 252 participants from four different nonhealthcare colleges within the Sandip Foundation. A self-designed and validated questionnaire was used for data collection. The study found that self-medication with OTC drugs is a widespread practice among non-healthcare students. The prevalence of self-medication was 63%, which is consistent with similar studies conducted in Ethiopia, India, and Korea. The mean knowledge score was 3.23, which suggests that while the score was above average, it was "still not good enough". A significant improvement in mean scores was observed after an intervention, particularly for the question "OTC stands For," where the mean score increased from 0.48 to 0.95. The study indicated that the majority of participants had a positive attitude toward the use of OTC drugs. However, the general population's knowledge about self-medication was found to be poor.

INTRODUCTION

Introduction to KAP Survey: In this study predetermined questions are arranged in a systematic questionnaire called the Knowledge, Attitudes, and Practices (KAP) survey, which is intended to collect both quantitative and qualitative data. It is employed to learn more

about people's views, attitudes, and actions. We can find misconceptions or misunderstandings that could obstruct intended activities and function as potential barriers to behavior change by completing KAP surveys. It's crucial to remember that KAP surveys are statement-based and primarily intended to gather opinions. Defined more simply, they offer data on what individuals

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say, but there may be noticeable differences between what is said and what is really done.

What is the KAP survey?

KAP overview means the knowledge, attitude, and practice. KAP surveys were first used in population research and family planning in the 1950s. These surveys, also known as knowledge, attitude, behaviour, and practice study, recently used to examine health-related behaviours and practices related to seeking health. To gather information about what is done (practised), believed (attitude), and known (knowledge) about a particular topic, a KAP study is designed In order to be exemplary of the target group. Qualitative as well as quantitative details can both be gathered through interviewers or self-administered semi-structured or structured questionnaires.

Knowledge:

It is the information and comprehension a person has regarding a specific topic or subject. Knowledge in KAP includes ideas, facts, and norms for the behavior that is being observed. Having knowledge of treatment options, ways to avoid illnesses, and the origins and symptoms of diseases could be considered knowledge in a medical field.

Attitude:

People's attitudes are known by their thoughts, feelings, and opinions regarding a specific concept, or idea. It includes a variety of emotions and affects how somebody sees and reacts to information and conditions. In a KAP study attitude is a very important part. An individual's tendency towards physical activity, for example may impact their willingness to get into a regular exercise routine.

Practice:



A individual's conduct or performance with regard to a specific act or habit is known to as their practice, behavior, or act. It illustrates the actions, acts, and habits people display in accordance with their attitudes and their level of knowledge. The KAP framework states that acknowledging people's practices helps to understand their actual behavior and makes it accessible to assess how well interventions or campaigns to encourage behavior change are working. As an illustration, in public health, examining persons' routines for handwashing can help uncover obstacles to good hygiene and provide targeted interventions that improve behavior.

Why is KAP study important?

Prior to an intervention or awareness campaign, a KAP survey should be conducted. The results of this study will provide the knowledge necessary for developing a successful program and provide the basis for information for a program's future success assessment. Conducting a Knowledge, Attitudes, and Practices (KAP) survey within pharmacists regarding skin diseases is essential for multiple reasons. Firstly, pharmacists have an essential duty in providing medications, especially those for skin disorders, and in giving medical advice. Whenever doctors know how much they know about various skin disorders, it makes it easier for them to determine knowledge gaps and alter educational programs accordingly. Additionally, assessing pharmacists' opinions on skin disorders helps ascertain their level of willingness to communicate with patients, offer useful guidance, and cooperate with other medical professionals. Finally, Examining the strategies pharmacists employ to treat skin disorders provides insight into present procedures, possible hurdles, and places where patient care could be enhanced, which improves the delivery of healthcare as a whole.

KAP Survey can generate data that can be used to:

Determine the gaps in knowledge, social customs, and behavioral patterns that can be utilized to point out the requirements, difficulties, and obstacles associated with the design and execution of programs. Improve understanding of prevailing knowledge, attitudes, and powerful influencing behavior. Determine preliminary standards and quantify the alterations that occurs due to interventions. Assess and determine the communication channels and necessary resources that are necessary for a program's successful execution. Establish the goals of the program and make well-informed judgments by using the information that has been acquired.

OTC medications:

OTC stands for Over The Counter drugs. According to World Health Organization (WHO), Over-the-counter (OTC) drugs are medications that are available without a prescription and can be purchased directly by consumers. These include common remedies like pain relievers, cold

medicines, and allergy medications. OTC medications, which anyone can purchase over-the-counter (OTC) without a prescription, are thought to be reasonably safe and appropriate for use unassisted by a medical practitioner. The WHO's anatomical therapeutic chemistry classification (ATS) divides them into ten categories: analgesics, laxatives, antithrombotic, antacids, cough and cold remedies, antihistamines, dermatological, throat medications, nasal medicines, and antidiarrheal.

For Example: -

Vicks: Vicks has history over hundred years. Used as cough and cold brand.

Paracetamol: paracetamol is one of the most widely used of all drugs, used as analgesic and anti-pyretic.

Cetirizine: Cetirizine safe and effective medication for treating allergic rhinitis, allergic conjunctivitis.

ORS: ORS can buy as OTC to treat dehydration due to diarrhea.



(Common OTC Drugs)



Plan Of Work: A systematic procedure is followed in order to do this research work.

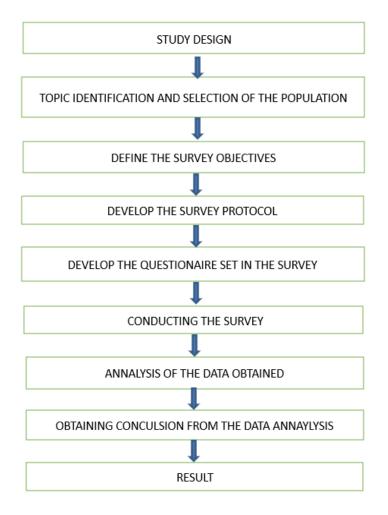
Following are the various steps which was done to conduct the survey.

Topic identification and selection of the population: Self-medication is part of self-care, which involves individuals choosing and using medication to treat illnesses or symptoms that they recognize for themselves. Now a days self-medication is the main cause of misuse of drug in

adults aged 18-65. To control the misuse of the OTC medication we educate them. Selection of the topic for studying knowledge, attitude and practice among non- health care students in various colleges.

Study population:

Study population are selected from the various colleges of the Sandip foundation. The students age between 18-25 who were frome non health care departments.



MATERIAL AND METHODS:

Data Analysis

The responses from the survey were systematically organized into an Excel sheet. The data was then

analyzed to compare the pre-test and post-test knowledge scores, as well as to evaluate the students' attitudes and practices. Paired sample statistics, paired sample correlation, and normal frequency distribution were used for the analysis.



Study protocol:

Study is not specific but it is conducted only in non healthcare students. The study done in only the 18-25 age students only no underage or overage students.no healthcare students are included in this study.

Objectives of the study was made: first step of every research work with defining its objectives. The objective of this study was to understand the myth, thoughts, knowledge, behaviour, attitude, practice and management of the students about OTC Drugs and guiding them through some facts and some OTC Drug management that needs to be followed in order to stay safe and healthy.

Developing of some questionnaire: various articles and literature were studied and some prominent questions were framed in the form of google form to study the knowledge and outlook of the students. Objective questions were formed with various possible answers options in order to make it easy for the participants.

The questionnaire was divided into two sections:

- 1. Demographic data (name, age, gender, year of study, name of institute, department)
- 2. It included questions related to knowledge, attitude and practice,

In which knowledge section was divided into pre and post assessment.

Conducting Survey: After the formation of questions. A permission letter was drafted seeking permission from various college principals. After getting their permission for conducting survey in their college students. This cross-sectional intervention was done by reaching out to particular classes and asking the students if they are willing

to participate in the survey. The consent once were sent the pre-test forms prior. After that a short basic knowledge was provided to them related to the questions they answered in the pre-test. Thus, after that two forms were sent in which one included post knowledge questions and second included attitude and practice assessment. Analysis of data obtained All the answers obtained in the survey were put systematically into an excel sheet for further analysis and comparison. Comparison between pre and post knowledge assessment, attitude and practice was done.

Conclusion – After the analysis of the data from the survey. the required conclusion and results were drawn.

Objective Of Study-

1.Assess knowledge evaluate the level of knowledge that non-healthcare/ non- medical college students have regarding OTC medicines and their awareness about OTC drugs consumption.

2.Understanding the attitude of students aged between 17-25 towards their health and management and understanding their practices and beliefs.

3.Guiding them that the drug abuse may lead to severe complications, addiction and inaccurate self-diagnosis and can give way to many disease conditions.

RESULT:

A questionnaire based prospective interventional study was carried out among the students who are pursuing non-health care courses under Sandip Foundation and Sandip University. A self-designed and validated questionnaire was used to collect the data. The questionnaire was divided



into 3 sections. A total of 252 participants were enrolled in the study.

According to the result, it was found that

- 1. Out of 252 participants, 44.1% students consumed OTC drugs recently.
- 2. 24.2% participants used OTC for vomiting.
- 3. 37.5% students use OTC commonly for headache.
- 4. 42.2% participants think to discard OTC when drug shows instability.
- 5. 32% students check expiry date while buying it.
- 6. 51.6% students do not prefer consuming OTC on daily basis.
- 7. 46.1% students uses Cold and cough as the most common OTC drugs as a self-medication.
- 8. 36.7% students sometimes experienced adverse effect from using OTC medication frequently.
- 9. 51.6% students use OTC medication in case of emergency in a typical month.
- 10. 79.3% students think that it is important to read instructions and label of OTC drugs.

DISCUSSION:

This prospective interventional KAP study of over the counter (OTC) drugs among no-health care college students aimed to comprehensively assess the knowledge, attitude and practices of the above mentioned demographics regarding these readily accessible healthcare products, with the goal of enhancing their decision making by addressing common misconception in their daily lives. The

study enrolled 252 participants from four different non-healthcare colleges under Sandip foundation. A self-designed and validated questionnaire was used for data collection. In the present study the prevalence of self-medication was 63%. This result was consistent with similar studies conducted in Ithiopia, India and Korea with 61%, 65.7% and 59.3% respectively. The mean knowledge score was 3.23. This finding was consistent with study conducted in Ithiopia, which reported that more than half of the respondents were found to have good knowledge about selfmedication and had a positive attitude. Similar findings were also reported by a study conducted in India. Although the mean score was above the average (4), it was still not good enough. About 32% of the respondents in the current study reported that they check expiry date of OTC medicines while buying it. This finding was higher than a similar study conducted in Korea in which 29.2% of participants reported that they never checked date of expiry.

CONCLUSION:

The study indicated that self-medication with OTC drugs is widely practiced among non-health care students. Overall, there is an positive view and even practice among the people toward responsible self-medication, which is a positive measure; however, the general population was poor in knowledge about self-medication. Based on the study's findings, an integrated approach is proposed to address the challenges caused by a lack of awareness about self-medication. Further, this study provides as a framework for future research on the subject, emphasizing the importance of the problem and the necessity to solve it. Future research can go deeper into specific aspects of responsible self-medication and look at other factors that influence knowledge, self-medication attitudes. and behaviors.

Recognizing and addressing this problem can provide helpful ideas into improving healthcare practices and results.

REFERENCES

- 1. Malak Khalifeh, Pascale Salameh (2018) a study on social knowledge and attitude towards O drug use among patients visiting community pharmacy in Lebanon. American J. of clinical medicine res (6):35-40
- 2. Kidist Mulugeta Bekele (2020) KAP on OTC among pharmacy and medical students University of Gondar, Northwest Ethiopia. Integrated Pharmacy Res and Practice (9):135–146.
- 3. Mijin Lee, Kyungim Kim (2021) a KAP Survey on Medication Safety in Korean Older Adults in korea, Healthcare J. published by MDPI (9):1-10.
- 4. Dr. B Vyshnavi, Bommysetty Lakshmi Priya, Thriveni (2023) A question based study regarding KAP of self -medication among general population in andra Pradesh. (11):245-258.
- 5. Chittaranjan Andrade, Vikas Menon, Shahul Ameen, Samir Kumar Praharaj(2020)Designing and conducting KAP surveys in psychiatry Indian J of Psychological Medicine. (42):478-481.
- 6. Anan S. Jarab , Walid Al-Qerem (2022) Pharmacists' knowledge and attitudes toward medication therapy management and the associated challenges and barriers for its implementation, Saudi Pharmaceutical J (30): 842–848.
- 7. Yohannes Kelifa Emiru(2019) Community Pharmacists' Knowledge, Attitude, and Professional Practice Behaviors Towards Dietary Supplements: Survey in Ethiopia, Nutrition and Dietary Supplements.(11):59-68.

- 8. Laura Brunelli, Luca Arnoldo (2022) The knowledge and attitudes of pharmacists related to the use of dietary supplements: An observational study in northeastern Italy, Preventive Medicine Reports (30):1-7.
- 9. Athiyah U, Setiawan CD (2019) Assessment of pharmacists' KAP chain community pharmacies towards their current function and performance in Indonesia, PharmPract (3):1-7
- 10. Nobuyuki Wakui , Mayumi Kikuchi, Risa Ebizuka (2022) Survey of Pharmacists KAP concerning COVID-19 Infection Control after Being Involved in Vaccine Preparation,International J of Environmental Research and Public Health (19):1-13.
- 11. Ali Haider Mohammed, Loh Hui Ying (2024) Development and validation of a KAP questionnaire for skin cancer in the general public, Research in Social and Administrative Pharmacy (20):124–136.
- 12. Fengbo Jin, Wanlu Tian, Leiming (2024) Knowledge, attitude, and practice toward leukemia in the general population and among family members of patients with leukemia, J Heliyon(10):4205-6440.
- 13. Kavindya Nirmani , Chanidi Danthanarayana(2024) Exploratory Research in Clinical and Social Pharmacy Assessment of KAP on self-care OTC medicines among pregnant women, J exploratory-research-in-clinical-and-social-pharmacy,(13): 2667-2766.
- 14. Bindu Malla, Deepti (2021) KAP of over-the counter drug among medical and dental students, J of Gandaki Medical College-Nepal (2):9-153.
- 15. Degu Jerene, Pedro Suarez (2019)KAP related to TB among the general population of Ethiopia, PLoS ONE (10):1-16.
- 16. Ahmed Esmael, Ibrahim Ali (2013) Assessment of Patients' KAP Regarding Pulmonary TB in Ethiopia, The American



- Society of Tropical Medicine and Hygiene(4): 785–788.
- 17. Sabaa saleh AL hemyari, ammar abdulrehman jairoun (2018) assessment of KAP osteoporosis and its predictors among university students, UAE, SPE(3):43-48
- 18. Mohammad saleh memon, sikander ali sheikh (2014), an assessment of KAP towards diabetic retinopathy in Karachi CCAL (1):143-188.
- 19. Yaseen rashidi, hesam manflouyan (2018) KAP of Iranian hypertensive patients regarding hypertension, J cardiovasc thorac res (1):14-19.
- 20. Amna khalid ,Fatima zulfikar (2018) a KAP study conducted in Lahore about breast cancer among young girls,IJSR (6):166-171.

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