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ABSTRACT

Background:-In many developing countries, much of the medicines dispensed bypass official healthcare system of the particular country. Thus, prescription medicines are often dispensed without proper prescription from registered medical practitioner. The resulting self-medication practices can have major influences on children's perception regarding medicines as they tend to imitate elders. The aim of the study is to assess the children's perception towards the use of various medications. **Objective:** -To obtain qualitative and quantitative data regarding the knowledge of medicines among childhood population in South Kerala and to compare the knowledge of medicines among various age groups. **Methodology:** -A cross-sectional, questionnaire based study was conducted among school children in the age group of 13-17 in South Kerala and data was analysed statistically. **Result:** -Total 150 school children voluntarily participated in the study, among which 57.3 % (n=86) were males and 42.6 % (n=64) were females. In this 39.3% know the use of all medicines they take while 60.6% do not. 30.6% children said that the efficacy of medicines depends on the efficiency of Doctor who prescribed it while 33.3% are not sure. 77.3% believes that recovery is faster on taking medicines. Around 21.3% children believes that taking medicines before being ill, prevents illness while 49.3% do not. 52% said that it is not safe to take medicines for longer duration while 23.3% thinks it is safe. **Discussion:** -Based on the study results, most children are familiar with the safe medication usage practices even though their knowledge is limited and shows some attitudes in favour of irrational use. Also, study provides evidence that they are not well prepared to be responsible medicine users. **Conclusion:** -Growing self-medication practices can have major impact on children as they tend to imitate their parents. At times, they may take it themselves and can result in various healthcare problems. Thus, children need to be well informed about medicines before they begin to use them independently.

KEYWORDS: WHO, medicines, self-medication, children's perception.**INTRODUCTION**

According to WHO, medicines are substances or preparations that are used in treating diseases. In many developing countries, much of the medicines dispensed circumvent the official healthcare systems of the specific country. Here prescription medicines may often be dispensed from pharmacies without a proper prescription from a registered medical practitioner.^[1] This leads to self-medication practices which can have major effect on children's perceptions regarding the use of medicines.

To a large extent, children are a good reflection of the culture that is surrounding them. Therefore, studying the knowledge and use of medicines in childhood is essential for understanding healthcare patterns among the growing generation as this can have a definite influence on the use of medicines as they reach adulthood.^[1,2]

By imitating their elders or from previous experiences, children may build up various concepts and expectations regarding the use of medicines. These perceptions may sometimes prove wrong and can affect their normal livelihood.^[2,3]

This study was conducted to assess the children's perceptions towards the use of medications in the aspect of their efficacy.

METHODOLOGY

A cross-sectional observation study was conducted in South Kerala, India from September to November 2019 using a preformed questionnaire. The study sample was school going children in the age group of 13-17 years belonging to upper, middle and lower class families. Sampling technique used was stratified random sampling method. The sample size was determined from previous

studies as 150 as this can have sufficient response variability.

The inclusion criteria for the study was both male and female school going children in the age group of 13-17 years from South Kerala whereas the exclusion criteria were mentally challenged children, chronically ill or bedridden children, children from outside South Kerala and children in the age group below 13 and above 17.

The questionnaire consists of 23 questions which include subject's demographic details, multiple choices, Yes/No questions and open ended questions. The design of questionnaire was taken from a literature on the same topic and some amendments made to serve the study purposes and validated by the institutional ethics committee.

DATA ANALYSIS

A preformed questionnaire based study was carried out and data was collected by direct enquiry to the subjects. The subjects were asked regarding the use of various medications, knowledge about its side effects, efficacy, and various routes of drug administration. Data was handled and analysed by simple statistical tools.

ETHICAL CONSIDERATIONS

Ethical approval was obtained from the institutional ethics committee of Ezhuthachan College of Pharmaceutical Sciences prior to the study.

RESULT

Total 150 children participated in the study Among which 57%(n=86) were male children and 43%(n=64) were females. Age group of children who participated in the study are listed below (Graph 1). Most of the children who participated in the study defined medicines as substances used for curing diseases.

39.3%(n=59) children knew the use of all medicines they take while 60.6%(n=91) were unaware. Majority of the children (77.3%) believes that recovery is faster on taking medicines which is in accordance with a previous study conducted.^[2]

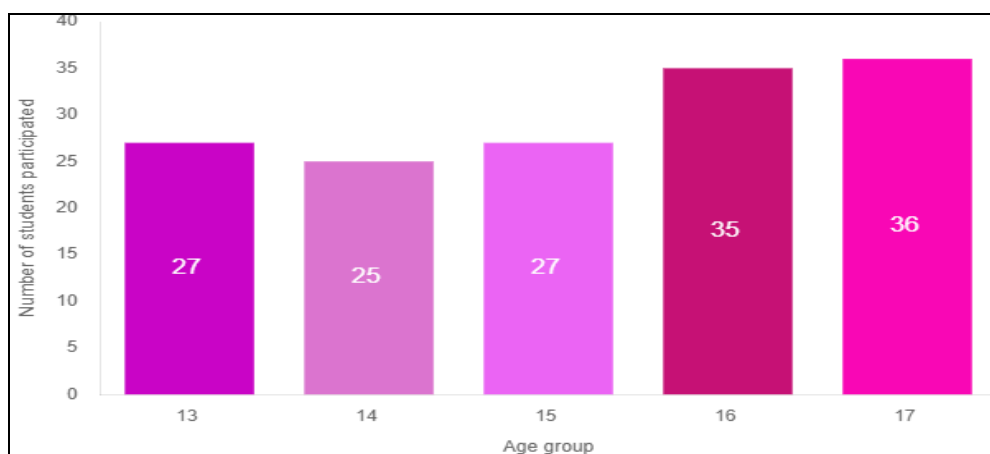
According to 30.6% children the efficacy of medicines is related to the Doctor who prescribed it while it is size of pills (17.3%), flavour (10%), source of prescription (8.6%) and 33.3% do not have any answers (Graph 2).

Most of the children (49.3%) believe that taking medicines before being ill cannot prevent illness, while 21.3% believes vice versa. This observation is contradictory to another study^[1] conducted where 98% children didn't give an accurate answer for the same question 52% children said that it is not safe to take medicines for a long duration while 23.3% believes it is safe and 24.6% don't have any particular answers. The above result is not similar to another study^[1] where 91.2% gave incorrect answers.

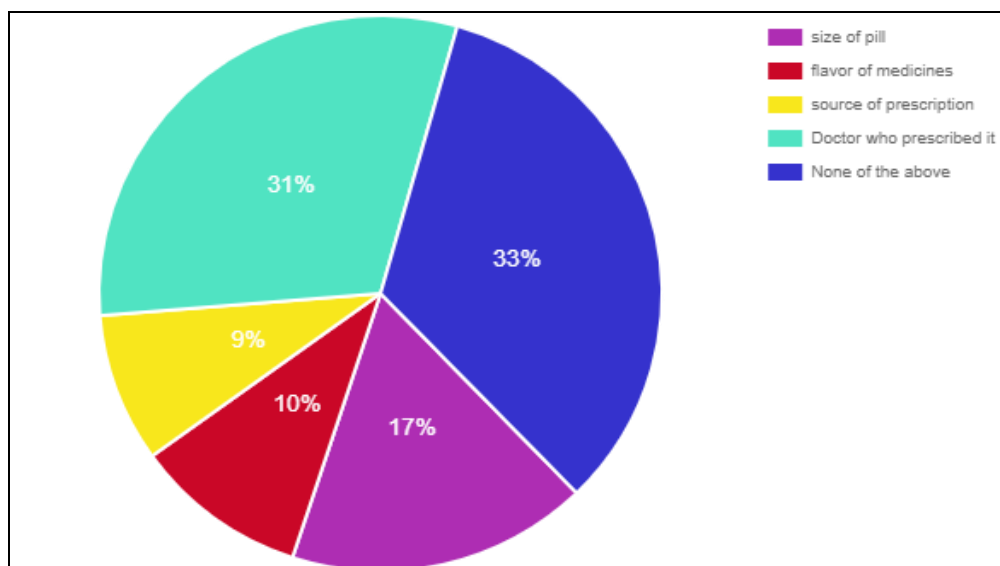
From the 150 respondents, 79.7% agreed that all medicines are not good for health. Around 64% believes that it is dangerous to take medicines without doctor's advice while 30,6% believes it is effective in some cases.

Only 25.3% (n=38) believes that medicines do not have side effects while the majority (n=96) show knowledge of the existence of side effects for medicines which is in accordance with a previous study.^[2]

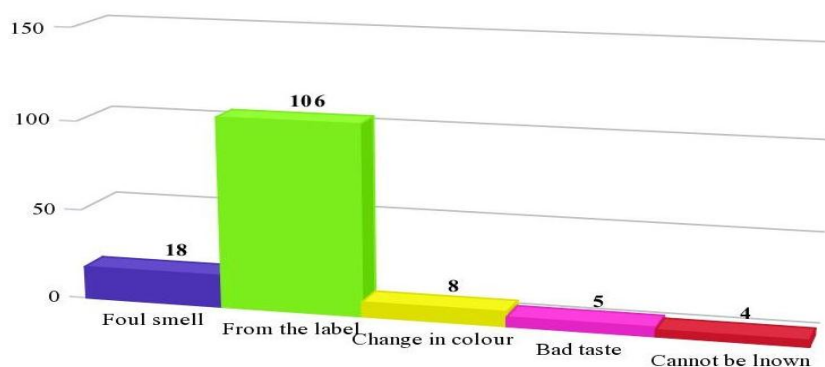
When asked how to identify an expired medicine, majority (70.6%) knew that it can be identified from the label while there existed a few who replied that expired medicines are identified by their foul smell, bad taste as well as change in colour and some replied that it cannot be known(Graph 3).



Graph 1: -Graph representing age group of children.



Graph 2:- Opinion of children regarding the efficacy of medicines.



Graph 3:-Children's knowledge on Identifying expired medicines.

DISCUSSION

Based on prior results, the knowledge of medicine use in children is limited. Children answer the asked questions in concrete terms according to their age as well as limited knowledge. The knowledge keeps on elevating with the age. But still their answers clearly show their lack of education regarding medicine use.^[3,4]

Lack of awareness about the limited knowledge that they have on medicine uses can lead to misuse behaviours in the future.^[2,5,6] Health education programs should be encouraged in schools and community centres to improve their perception towards medicine.^[7,8]

Results show that the interviewed children show confusions regarding the efficacy of medicines. A large proportion believes that the efficacy of medicine depends on the doctor who prescribed it and some others believe it is dependent on the size of pills.^[9]

Some of the answers given by the children shows lack of knowledge that can be life threatening.^[2,10] For example, a large percentage of children do not know the exact use of all medicines they are taking. Also a high percentage of children believe that taking medicines before being ill prevents illness.

There existed confusion regarding the effectiveness of taking medicines without consulting the health care provider. Even though most of the children believed that the expired medicines can be identified from their label, there exists many who gave wrong answers which can be dangerous in future. This emphasize the need for education for children as well as their parents regarding the safe use of medicine.^[3,9,11]

Limited knowledge of children about medicines indicates the miles they are from safe medicine practices. Data obtained from this study clearly emphasize the need for medicine education programmes from the elementary level.^[2,12]

CONCLUSION

Based on the study results, most children are familiar with the safe medication usage practices even though their knowledge is limited and shows some attitudes in favor of irrational use. Also study provides evidence that they are not well prepared to be responsible medicine users.

Growing self medication practices can have major impact on children as they tend to imitate their parents. At times, they may take it themselves and can result in various healthcare problems.

Data obtained from the study indicates that their knowledge is not sufficient and sometimes can even be contradictory. Thus children need to be well informed about medicines before they begin to use them independently.

Health education programs for children should be based on the intellectual level of the children and also by their level of comprehension of the information. This can include development of a school curriculum for various age groups and also based on socio-cultural conditions.

Thus Children need to have a brief knowledge about medicines, their uses, precautions to be taken while using them and also in particular the use of all medicines they are taking.

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REFERENCES

1. Syofyan Syofya, Dachriyanus Dachriyanus, Masrul Masrul and Rosfita Rasyid, Children's Perception and Belief about Medicines: Effectiveness and Its Autonomy, Open access Maced J Med Sci., 2019; 7(15): 2556-2562.
2. Aramburuzabala, Pilar (1997, September/October). Children and adolescents as family members: What they know and do. In Proceedings of the Conference Children and Medicines: Information isn't just for Grownups (pp. 42-48). Rockville, MD: The United States Pharmacopeia.
3. Omar Thanoon Dawood, Mohammad Izham Mohammad Ibrahim, Anna Christina Abdullah, Children's knowledge and beliefs about medicines. Journal Of Child Health Care, 2015; 19(1): 73-83
4. Sleath, Betsy, Bush, Patricia J., & Pradel, Françoise G. (2003). Communicating with children about medicines: A pharmacist's perspective. American Journal of Health-System Pharmacy, 60: 604-607.
5. Sharaideh, Rawia, Wafaify, Mayyada, & Albsoul-Younes, Abla. M. (2013). Knowledge and attitude of school children in Amman/Jordan toward the appropriate use of medicines: A cross-sectional study. Saudi Pharmaceutical Journal, 21: 25-33.
6. Sanz, Emilio J. (2003). Concordance and children's use of medicines. BMJ, 327: 858-864.
7. Ranelly, Paul L., Bartsch, Karen, & London, Kamala (2000). Pharmacists' perceptions of children and families as medicine consumers. Psychology & Health, 15: 829-840.
8. International Pharmaceutical Federation (2001). FIP statement of principle: The pharmacist's responsibility and role in teaching children and adolescents about medicines. Adopted by the Pharmacy World Congress, Singapore.
9. Hansen, Ebba H., Holstein, Bjørn E., Due, Pernille, & Currie, Candace E. (2003). International survey of self-reported medicine use among adolescents. The Annals of Pharmacotherapy, 37: 361-66.
10. Almarsdottir, Anna B., & Zimmer, Catherine (1998). Children's knowledge about medicines. Childhood, 5: 265-281.
11. Atkin, Charles K. (1978). Effects of drug commercials on young viewers. Journal of Communication, 28: 71-79. Bozoni, Katerina, Kalmanti, Maria, & Koukouli, Sofia (2006). Perception of knowledge of medicines of primary schoolchildren: The influence of age and socioeconomic status. European Journal of Pediatrics, 165: 42-49.
12. Hämeen-Anttila, Katri, Juvonen, Mirja, Ahonen, Riitta, Bush, Patricia J., & Airaksinen, Marja (2005). What schoolchildren should be taught about medicines: Combined opinions of children and teachers. Health Education, 105: 424-436.