

Familiarisation of Children with Medicines and their Sources of Information

OMAR THANOON DAWOOD¹, MOHAMED IZHAM MOHAMED IBRAHIM², ANNA CHRISTINA ABDULLAH³

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The common source of information about medicines among children refers to how children receive information and from whom. The source of information about medicines among children from different age groups originates from the parents. In United States, children aged 5-14 years old, Greece age 6-11 years old, Canada age 12-15 years old and Finland age 11-17 years old reported that the parents were the common source of information among them, especially the mother [1-2]. In a German study, children aged 15-17 years old indicated that the common sources of information were the medicine package and they referred to their parents as the last source for information about medicines [3,4]. Another source of information about medicines was physicians and nurses [4-5]. Children accessibility to home medicines, availability of medicines at home and observing family members taking medicinal may increase their information about medicines. The lack of medicines knowledge makes children easily influenced by informal source of health information. This study is very important to explore the familiarity with medicines among children and their sources of information before they become independent medicines users.

In the present study, self-administered questionnaires were distributed among 1,000 school children from grade 5 and 6 (11-12 years) in Penang Island, Malaysia. The socioeconomic status of the family was obtained from the parents. A convenience sampling method was conducting to recruit the participants in this survey. All schoolchildren from grades 5 and 6 in four schools were recruited in the survey. The study approval of this study was first obtained from the Ministry of Education through the Educational Planning and policy Research Division. The consent form was obtained from the parents to conduct this study after explaining the aim of the study to children and their parents. The face and content validity was done by experts in the field to ensure the accuracy of the questionnaire. The questionnaire was provided in two languages (Malay and

English) to make the questions more understandable for children and easier for them to answer. The questionnaire was distributed to all children and filled up during the school session and returned to their teachers immediately upon completion.

On the general sources of information, 86.1% of the children considered their parents as a source of information about medicines by answering always and sometimes. Also within the role of physicians and pharmacists, 73.8% of the children said that their physicians or pharmacists are teaching them about taking medicines correctly. Regarding the medicines' label, 87.9% of the children read the label on the medicines before taking medicines. Around sixty percent of the children said that they read something about medicines. About the role of the school, 63% of children said that their schools are not a source of information about medicines. More than half (56.1%) of the children said that television is a source of information about medicines. This study showed that most children referred to their parents as a source of information about medicines while the physicians and pharmacists were the secondary providers. In the previous studies, children referred to their parents as the first source of information about medicines whereas the physicians and the teachers were the second source of information [5]. Another research showed that the main sources of information among the children were the physicians and community pharmacists while the second source of information was parents [6]. This result may be reasoned by the limited accessibility in consulting the physician among Malaysian children.

Regarding the familiarity with medicines, [Table/Fig-1] showed that most children were familiar with medicines. In case of accessibility to find the medicines, 66.5% of the children said that they can easily find and take the medicines in their home. The socioeconomic status of the family had a significant effect on the accessibility of medicines [Table/Fig-1]. The previous studies showed that children

	Low SES	Middle SES	High SES	Total
Have you ever taken medicine?				
Yes	88.3	95.4	98.4*	91.8
No	11.7	1.6	4.6	8.2
Is there medicine at your home for an emergency?				
Yes	68.1	91.9	94.1*	78.0
No	31.9	8.1	5.9	22.0
Do you take a medicine for chronic disease like asthma, diabetes or epilepsy?				
Yes	13.9	7.6	17.1**	13.1
No	86.1	92.3	82.9	86.9
Can you easily find and take the medicines that are at home?				
Yes	57.6	74.6	86.2*	66.5
No	42.4	25.4	13.8	33.5
Do your parents or family members use medicines?				
Yes	67.1	87.0	90.8*	75.8
No	32.9	13.0	9.2	24.2

[Table/Fig-1]: Association of the familiarity with medicines and the SES of the family (%). * p< 0.001, ** p< 0.05

had accessibility to household medicines. Moreover, children with higher SES were more accessible to medicines at their home [5]. This may be due to parents' awareness to keep medicines for an emergency or because of the frequent occurrence of illness.

This study has limited to children aged 11-12 years old. The younger children were not included in the study due to the difficulty in obtaining the data and due to the level of understanding of the questionnaire. Previous researches have recommended that medicine education should be introduced in the age of 11-12 years old. In conclusion, this study showed that most children were familiar with medicines through their past experiences or through observation of the family members. The role of the health care professionals in the area of public health should be increased. Pharmacists for example can be actively involved to disseminate basic information about medicines among children in order to increase their understanding about medicines.

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PARTICULARS OF CONTRIBUTORS:

1. Faculty, Department of Social and Administrative Pharmacy, School of Pharmaceutical Sciences, Universiti Sains Malaysia, Penang, Malaysia.
2. Professor, Department of Social and Administrative Pharmacy, College of Pharmacy, Qatar University, Doha, Qatar.
3. Professor, Department of Early Childhood Education & Curriculum Studies, School of Educational Studies, Universiti Sains Malaysia, Penang, Malaysia.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Omar Thanoon Dawood,
Faculty, Department of Social and Administrative Pharmacy, School of Pharmaceutical Sciences, Universiti Sains Malaysia.
Phone: +60174145676, E-mail: othd2000@yahoo.com

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