

**CHILDREN'S KNOWLEDGE AND ATTITUDES TOWARDS  
TREATMENT OF COMMON ILLNESSES.**

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**Summary**

In spite of the widespread of common illnesses among children they rarely receive medical advices about their illnesses. This study is important to explore children's awareness about the treatment of common illnesses and to improve their knowledge about the treatment of common illnesses to promote healthy lifestyle among them. The study was conducted with the objectives of evaluating the children's knowledge about the aims of the treatment and to evaluate the children's attitudes towards medicine use to treat their illnesses. A cross-sectional survey was carried out among the pupils from standards fourth, fifth and sixth in the primary schools. Cluster sampling method used to select one class from each standard to become the sample of this study. A self-administered questionnaire was used to become the main instrument for data collection. The questionnaire has been translated to Chinese language to become more understandable for children. This study showed that children in different age group had superficial knowledge about using medicine to treat their illnesses. No significant difference between the genders of children and their knowledge and attitudes. Statistically significant differences among the age of the children of 10 to 12 years were found. Children's age appeared to affect their attitude towards the treatment of common illnesses and the p-value was ( $P = 0.006$ ). Upon growing, the children in the age of 12 years old have a better understanding towards the treatment of illnesses though their views. This study revealed that children's knowledge related to health issues was inadequate. Providing children with simple information about their illnesses was needed and medicine education should be included in schools' curricula to ensure that children will be able to deal with their common illnesses in future. Parents play a major role in treating their children and the health care professional should communicate directly with the parents.

**Keyword:** attitude, children, common illness, knowledge, Malaysia, treatment

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### Introduction

A general concept of 'knowledge and attitude' towards treatment of common illness is defined as awareness or familiarity gained by experience and a settled way of thinking or feeling about medical care for common illness <sup>[1]</sup>. Most researchers face a special challenge when they explore children's understanding of health and illness due to the development cognitive level of children in different age group. Evaluate children's knowledge about their illnesses may help health care professionals to develop an explanations tools of illness and preventive health programs <sup>[2]</sup>. Previous studies indicated that children's concepts of health and illness are complex and their understanding of health problems still inadequate <sup>[3,4]</sup>. Many efforts have been made by government and non-government bodies to send the message to the community to upgrade their knowledge with treatment available especially for the common illnesses, despite of these efforts to educate patients about health issues, children still have not been given a fair attention in getting information to have a good knowledge and positive attitude towards the treatment of common illnesses. Children are important users of health services, accounting for up to a quarter of general practitioner consultations <sup>[5]</sup>. However, as in most economically deprived countries, self-treatment <sup>[5]</sup> of common illnesses by laypeople is common and local shops deal in all sorts of pharmaceuticals including those that should be sold only at pharmacies.<sup>[6]</sup> Children constitute a larger percentage of the population in developing countries and are exposure to many illnesses as a result of poverty <sup>[7]</sup>. Children are seen as vulnerable beings, depending on protection by adults <sup>[12]</sup> and medicines are regarded as powerful and potentially dangerous substances. Accordingly, children are not supposed to deal with medical drugs themselves, but should rather receive those from the stronger and more knowledgeable adults, be it their parents or medical doctors <sup>[13]</sup>. Children should play a bigger role in their recovery from illness.

Most countries have legislation which aims to separate children and medicines: the circulation of pharmaceuticals is limited to institutions such as pharmacies, hospitals or health care professionals and age-limits are set to prevent children, usually defined as those below 18 years of age, from access to over-the-counter-drugs <sup>[14]</sup>. In Malaysia, very little are known about children knowledge and attitude towards the treatment of their illnesses and the previous studies showed that children have low level in most issues of health knowledge <sup>[18]</sup>. This study is important in increasing the attention in getting the correct information for children and making children to have a good knowledge and positive attitude towards the treatment of common illnesses.

### Methods

#### Study design

Pilot study was performed through cross-sectional survey to evaluate the children's knowledge and attitudes towards treatment of common illnesses. This study was conducted Chinese schoolchildren in Penang Island.

### **Study tool**

The survey was conducted among schoolchildren from standard 4 to 6. The data were collected through self-administered Chinese language questionnaire with close-ended questions. The validity of the questions had done with expertise of some educators. The questionnaire consisted of one section for the demographic information of children, and another 2 sections consisted of 7 items for knowledge and 5 items for attitudes. The instrument was not too extensive because of the size of sample and the age of children. Regarding the formulation of the questions, occasionally the interviewer had to be clear and adapt their phrasing to the cognitive level of the children.

### **Sample technique**

The sampling frame of the study depended on the children list of each standard, and from the list, one class selected to become our sample, on other word to be the representative of the whole standard. This showed that the sampling method used was cluster sampling. Therefore three classes were selected, each one from a particular standard which corresponds to their age group. Each class consisted of more than 40 children. Therefore, the ample size in this survey was 131 children. A larger sample size is unnecessary because it will require more time spent, and the cost was irrelevant.

### **Data collection procedure**

Self-administered questionnaire was used in this survey. After explaining the aim of this study, all children received the same questionnaire to fill it on the spot. The questionnaires successfully completed and returned to the researcher in the same time. This survey was done during September 2008 by the aid of the teacher of each standard.

### **Data analysis**

The results were analyzed using the Statistical Package for Social Sciences (SPSS, version 15) software. Data were described using frequency distribution. Chi-square test was used to evaluate the association between variables,  $P < 0.05$  consider significant.

## **Results**

### **Socio-demographic characteristics**

Table 1 presents the socio-demographic characteristics of the sample. 131 questionnaires were distributed among pupils in standard 4, 5 and 6 in the school and all of the questionnaires were responded (response rate = 100%). 46 (48.9%) of the respondents were males whereas 67 (51.1%) of them were females. The age distributions among the respondents were: 10 years old was 40 (30.5%), 11 years old was 42 (32.1%), and 12 years old was 49 (37.4%).

**Table 1: Demographic description of study sample**

Socio-demographics of the child		N	%
Gender	Male	64	48.9
	Female	67	51.1
	<b>Total</b>	<b>131</b>	<b>100%</b>
Age	10 years	40	30.5
	11 years	42	32.1
	12 years	49	37.4
	<b>Total</b>	<b>131</b>	<b>100%</b>

**Children's knowledge towards treatments of common illnesses**

Table 2 presents the variation of knowledge by gender and age. From Chi Square test showed some significant differences between the age group and the children's knowledge towards treatment their illnesses. From the gender Chi Square test showed that is no significant difference between children's knowledge and their gender. Just in one statement ( $P = 0.003$ ) for gender.

**Table 2: Children's knowledge towards treatments of common illnesses**

Items	Responses		Chi-Square Test p values	
	Correct % (n)	Wrong % (n)	gender	age
(1) I need to take a medicine when I get sick.	93.9% (123)	6.1% (8)	0.507	0.290
(2) I feel better after taking medicine when I am sick.	82.4% (108)	17.6% (23)	0.570	0.444
(3) Drinking more water can cure my illness.	76.3% (100)	23.7% (31)	0.003*	0.004*
(4) If you take more medicines, you will become better faster?	27.5% (36)	72.5% (95)	0.872	0.012*
(5) If you don't take a medicine, do you think you will feel worse?	61.8% (81)	38.2% (50)	0.218	0.021*
(6) If you take enough rest, do you think you still need medicine to cure your illness?	60.3% (79)	39.7% (52)	0.116	0.072
(7) I think I need an injection for minor illnesses.	87.8% (115)	12.2% (16)	0.244	0.000*

\*p-value > 0.05

**Children's attitude towards treatments of common illnesses**

Table 3 presents the attitudes for children towards treatment of their illnesses. In general children's attitudes were negative depend on their age group, and the Chi Square test showed that is a significant difference between children's attitudes and their age group. In other words, no statistically significant have found between the gender and their attitudes and the p-value showed that in the table below.

**Table 3: Children's attitude towards treatments of common illnesses**

Items	Responses		Chi-square Test P values	
	Positive, % (n)	Negative, % (n)	gender	age
(1) I will consult the doctor when I get sick.	76.3% (100)	23.7% (31)	0.378	0.006*
(2) I would need to see a witch doctor to cure my illness.	87.7% (115)	12.2% (16)	0.244	0.076
(3) I take my medicines depending on my parents.	71.0% (93)	29.0% (38)	0.186	0.004*
(4) My parents treat my illnesses by using traditional methods.	72.5% (95)	27.5% (36)	0.580	0.562
(5) I follow the instructions of pharmacists and doctors in taking medicines.	93.1% (122)	6.9% (9)	0.677	0.356

\*p-value > 0.05

**Discussion**

The overall findings of the study indicated that there is no significant difference in responses of the respondents in both genders. This showed that the males and females have the same knowledge and attitude related to their cognitive level in each standard. On the other hand, when it comes to the age, one of our independent variables, the result shows a quite obvious difference among children with different age groups. The observation that children's ideas about health and illness mature with age is no doubt correct<sup>[15]</sup>. Our findings are being proved since most of the respondents who answered correctly are twelve years old, the highest age group in our study. The increasing age of the children makes their knowledge towards various issues better most probably due to the increase exposure to the world and surroundings as they growing up. However, most of the children who answered correctly for feeling worse if they don't take a medicine are eleven years old but not twelve years old. The same case happened for another statement which results in a large proportion of eleven years old answered the question wrongly. This occurs most probably due to the confounding variable 'experience'. The understanding of illness may be more advanced among children who have had more than the usual degree of experience with illness. The other is the occurrence of an interaction between age and experience, with experience making a difference to the level of illness understanding at one age but not at another. Either result would moderate any clinical use of age as the base for deciding upon the level of advice or explanation offered to children.

The facilitating effect of experience may be expressed in different ways depending on the child's age and the type of illness the child has experienced<sup>[16]</sup>. In this study, primary school children's attitude in response to the treatment of common illnesses was investigated. Most of the children participating in this study answered 'yes' for the statement that they will consult the doctor when they get sick. Generally, they believe that they should seek the doctor when they are ill as the doctor can treat their illnesses. The doctor will begin an evaluation by performing a complete medical history and offer treatment for the children based on their symptoms of illnesses. However, children differ greatly from adults in their understanding about the treatment from doctor. Some children believe that doctors deliberately set out to hurt them<sup>[7]</sup>. Moreover, they are afraid of being injected by doctor or taking the medicine. Children below the age of 7 years often see illness as occurring by contagion as if by magic or as a punishment for bad behavior<sup>[3]</sup>. On the other hand, the majority of children have appropriate attitude toward consuming medicine as they follow the instructions of pharmacists and doctors in taking medicines. One possible explanation is pharmacists and doctors are health professionals who are specially trained to diagnose and treat common illness in children. Thus, they have knowledge in the doses of the medicine that should be taken.

Findings from this study suggested that most of the children would not need to see a witch doctor to cure their common illness. This is because the children have positive attitudes toward the treatment of common illness from the interventions such as common illness management programs, educationally related sessions to teach about illness, self-confidence or self-esteem groups to improve self-concept, coping skills or stress management groups and recreation related or skill development activities. These interventions have enhanced more positive attitudes towards treatment of common illness in children, thus making them do not believe in seeking a witch doctor to cure their illness. Their attitude towards this treatment is associated with subsequent improvements in common illness functioning.

Interestingly, this study showed that the majority of the children take their medicine depending on their parents. The attitude towards seeking an appropriate treatment for children's common illnesses is associated with being aware of the symptoms of illness manifested by the child. To our knowledge, parents are the first person who noticed the physical changes in their own children as a result of the occurrence of illness. The medicines taken by the children are provided or facilitated by their parents as assisted treatment. For instance, children under age five are unable to describe their illness symptoms, thus they rely on their parents to explain their symptoms to the doctor and take the medicines. The attitude towards the treatment of illness of the children lies beyond their parents' domain. The kind of treatment they receive from their parents affects their attitudes and behavior in a number of ways<sup>[17]</sup>. Therefore, if the parents are less concerned about the health of the children or are insensitive to their illnesses as demonstrated, eventually the children will not get the appropriate treatment for their illness. Besides that, most of the participants in this study stated that their parents do not used to treat their illnesses by using traditional methods. This is due to the parents believing more in modern medicine to cure their children. Sometimes, the parents' perception of their children's response accurately reflects their children's illnesses and needs for the treatment, especially as the children become more independent. The children's charter on health was essentially a parents' charter and reflects a common belief that children's views may be represented by their parents<sup>[18]</sup>.

This study showed that there is no significant difference between the genders of the children. Statistically significant differences among the age of the children of ten to twelve years were found. Children's age appeared to affect their attitude towards the treatment of common illnesses as Chi-square test showed that there is a significant difference among the age of the children. The proportions of children who will consult the doctor when sick reduced with age from the age of ten to twelve. In contrast, the proportions of children who take medicine depend on their parents increased with age. Although it is difficult to generalize, the children who ages are too small do not have a mature understanding towards their treatment of illnesses. Upon growing, the children in the age of ten years old have a good understanding towards the treatment of illnesses though their views are not those of an adult. They opine that a single factor - often a "germ" - causes the illness and therefore contagious. They do not correctly infer the reasons for treatment. From the ages of 11-12 years old, the children have a deeper understanding and become more aware that illness can become aggravated by psychological factors. They also understand that the notion of drug related side effects and the possibility of delay before responding to the treatment <sup>[9]</sup>.

### **Limitation**

This study had several limitations, the first was the small number of sample, this may affect the reliability of the study to represents the children as a whole and the study was limited up to the school only, a larger scale would be better for representation. The second limitation was the age group of respondents, this study covered children who in the ages of 10-12 only, so the results could not represent the actual knowledge and attitude towards the treatment of common illness. The third limitation in this study was the race of the children. This paper only covered Chinese children but not the other major races in Malaysia. The last limitation was the geographical factors and the respondents were from the same city in the same state.

### **Conclusion**

The data reveals some difference in the age group regarding their knowledge and attitude towards the treatment. Children aware to the benefits of medicines in the treatment but, they have inadequate knowledge to treat their illnesses. In addition, children have negative attitude to consult health care providers when they get sick and they depend on their parents to treat their illnesses. This research can be an eye opener to the society so that children province in the treatment of common illness will no longer become oblivious. The experience gained must not necessarily gain from the encounter or interaction with the disease some other creative way can be tailored to inform the children with the basic knowledge. Therefore, health care professionals should communicate directly with children about their illnesses at an appropriate cognitive level in order to increase their understanding and skills concerning health issues.

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