

Assessment of Primary Schools Teachers' Knowledge and Attitudes toward Communicable Diseases Prevention and Control at Primary Schools

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Abstract

Background: Communicable diseases are illnesses that transmitted from a person, animal, or inanimate source to another person either directly or indirectly. Illnesses caused by communicable diseases are common among school students because of overcrowding.

Objectives: The purpose of the study is to assess the knowledge and attitudes of primary school teachers toward communicable diseases prevention and control and to find out the relationship between the primary school teachers' knowledge and attitudes with their personal and socio-demographic characteristics.

Methodology: A descriptive cross-sectional study design using a simple random sample of ($N=400$) teachers working in primary schools through the period from October 2018 to June 2019. A questionnaire was created for this purpose. Its composed of (4) parts. The overall items included in the questionnaire are (55) items. A pilot study conducted to determine the reliability of the questionnaire, while the validity is obtained by distribution of the questionnaire through a panel of (15) experts. Statistical package for social sciences (SPSS) version (25) used for the analysis of the data. Appropriate statistical tests were used accordingly.

Statistical analysis used: The data are coded and tested by the application (SPSS) through the descriptive and inferential analysis.

Results: The study findings indicate that most of teachers (65.8%) had good knowledge toward communicable diseases prevention and control, also the highest percentage of teachers had agreed attitudes toward communicable diseases.

Conclusions and recommendations: All teachers working with children may be at risk for getting communicable diseases, especially those with less years of experiences. Therefore, it is necessary to increase their awareness toward communicable diseases prevention and control through collaboration with ministry of health and environment and through education programs about communicable diseases and ways of prevention.

Key words: *assessment, teacher, knowledge, attitude, communicable diseases, prevention, control, primary school.*

Introduction

A communicable disease is a disease caused by infection (invasion of the body) with specific germs such as viruses, bacteria, fungi, and parasites ¹. Communicable diseases are still the major killers in the world, with tuberculosis, malaria and HIV

taking a huge annual toll (approximately 4–5 million deaths). They are found particularly in conditions that encourage transmission, such as overcrowding or poor hygiene, so are more common in developing countries ². Transmission of a communicable disease may occur through one or more of diverse pathways including physical contact with infected individuals.

These agents may transmitted through liquids, foods, body fluids, contaminated objects, airborne inhalation³. Illnesses caused by communicable diseases are common among school children and other childcare settings. Socioeconomic factors can increase the risk of outbreaks among school children in these settings⁴. Health education can improve school population knowledge on communicable diseases and promote the development of appropriate behaviors toward communicable diseases⁵. Health education should be provided for school population to validate positive health-promoting beliefs, intentions, and behaviors⁶. Teachers are in a very powerful position. Their behavior, as a model and their opinions as to what constitutes good health, impact very directly on the concepts of health adopted by their school students. They are concerned in promoting some aspects of health, such as improving the self-esteem of their learners, teaching acceptable ways of relating to others and disease prevention⁷.

School children are the greatest investment of any community and the main basis for its development. They are the biggest promise for the future⁸. Communicable disease can be a major cause of illness among school children and can affect a child’s schooling by causing absenteeism⁹.

Lack of knowledge about prevention and control of diseases lead to high risk of disease spreading causes increasing mortality and morbidity among school children¹⁰.

Methodology

The study aims to assess the knowledge and attitudes of primary school teachers regarding communicable diseases prevention and control.

Study Design: A descriptive cross-sectional study that conducted during the period of 30 /7/ 2018 to 29 /7/ 2019.

Setting of the Study:The study was conducted at the primary schools of Al-Hilla city which include (Hilla city center, Abu-Ghariq district and AL-Kefal district)

Study Sample: All primary school teachers (n=400) were included from (27) governmental primary schools who works at Al-Hilla city primary schools.

Study instrument: The information of data was collected through a questionnaire used to assess the knowledge and attitudes of primary school teachers toward communicable diseases prevention and control.

Data Analysis: The data were coded and tested by the “statistical package of the social sciences (SPSS) (Version 25)”. A descriptive analysis includes frequencies and percentage; inferential data analysis included Chi square test.

Results

Table (1): Relationship between the Overall Teachers’ Knowledge and their Socio-demographic and Personal Characteristics

Demographic data	Rating	Teachers Knowledge			Total	d. f	Sig.	
		Poor	Fair	Good				
Age	22-32 years	3	13	48	64	6	obs.= 13.024 crit.= 15.329 P-value=0.043	S
	33-43 years	5	52	103	160			
	44-54 years	6	49	74	129			
	55+ years	0	9	38	47			
	Total	14	123	263	400			
Gender	Male	3	27	47	77	2	obs.= 0.942 crit.= 5.991 P-value=0.624	NS
	Female	11	96	216	323			
	Total	14	123	263	400			

Cont... Table (1): Relationship between the Overall Teachers' Knowledge and their Socio-demographic and Personal Characteristics

Marital Status	Single	2	6	23	31	8	obs.= 5.307 crit.= 15.507 P-value=0.724	NS
	Married	12	113	225	350			
	Widowed	0	2	10	12			
	Divorced	0	2	4	6			
	Separated	0	0	1	1			
	Total	14	123	263	400			
Residency	Urban	13	112	239	364	2	obs.= 0.064 crit.= 5.991 P-value=0.968	NS
	Rural	1	11	24	36			
	Total	14	123	263	400			
Economic	Enough	6	61	147	214	4	obs.= 2.903 crit.= 9.488 P-value=0.574	NS
	Enough to certain limit	7	52	103	162			
	Not enough	1	10	13	24			
	Total	14	123	263	400			
Duration of the service	<5 years	0	8	32	40	12	obs.= 10.171 crit.= 21.026 P-value=0.601	NS
	5-10 years	3	17	39	59			
	11-15 years	2	14	30	46			
	16-20 years	5	33	58	96			
	21-25 years	2	21	42	65			
	26-30 years	2	17	26	45			
	31+ years	0	13	36	49			
	Total	14	123	263	400			
Educational Level	Institute	7	66	148	221	4	obs.= 5.547 crit.= 9.488 P-value=0.236	NS
	College	6	57	109	172			
	Postgraduate	1	0	6	7			
	Total	14	123	263	400			

” Chi-square observer, Chi-square critical, Df= Degree of freedom, P-value= Probability value, S= significant, NS= non significant, HS= high significant”

This table explains there was insignificantly association between primary schools teachers knowledge and personal characteristics at *p-value* <0.05.

Table (2): Relationship between the Teachers’ Attitudes about Prevention and Control and their Socio-demographic and Personal Characteristics

Demographic data	Rating	Teachers Attitudes			Total	d. f	Sig.	
		Disagree	Partially Agree	Agree				
Age	22-32 years	0	2	62	64	6	obs.= 10.091 crit.= 15.329 P-value=0.121	NS
	33-43 years	0	12	148	160			
	44-54 years	3	11	115	129			
	55+ years	2	2	43	47			
	Total	5	27	368	400			
Gender	Male	1	9	67	77	2	obs.= 3.705 crit.= 5.991 P-value=0.157	NS
	Female	4	18	301	323			
	Total	5	27	368	400			
Marital Status	Single	1	1	29	31	8	obs.= 23.286 crit.= 15.507 P-value=0.003	S
	Married	3	23	324	350			
	Widowed	1	2	9	12			
	Divorced	0	0	6	6			
	Separated	0	1	0	1			
	Total	5	27	368	400			
Residency	Urban	4	23	337	364	2	obs.= 2.003 crit.= 5.991 P-value=0.367	NS
	Rural	1	4	31	36			
	Total	5	27	368	400			
Economic	Enough	0	15	199	214	4	obs.= 7.587 crit.= 9.488 P-value=0.108	NS
	Enough to certain limit	5	10	147	162			
	Not enough	0	2	22	24			
	Total	5	27	368	400			

Cont... Table (2): Relationship between the Teachers’ Attitudes about Prevention and Control and their Socio-demographic and Personal Characteristics

Duration of the service	<5 years	0	2	38	40	12	obs.= 10.446 crit.= 21.026 P-value=0.577	NS
	5-10 years	0	3	56	59			
	11-15 years	0	3	43	46			
	16-20 years	3	5	88	96			
	21-25 years	1	6	58	65			
	26-30 years	0	6	39	45			
	31+ years	1	2	46	49			
	Total	5	27	368	400			
Educational Level	Institute	2	17	202	221	4	obs.= 1.681 crit.= 9.488 P-value=0.794	NS
	College	3	10	159	172			
	Postgraduate	0	0	7	7			
	Total	5	27	368	400			

” Chi-square observer, Chi-square critical, Df= Degree of freedom, P-value= Probability value, S= significant, NS= non significant, HS= high significant”

This table shows there was insignificantly association between teachers attitudes toward prevention and control of communicable diseases and their socio-demographic and personal characteristics at p-value >0.05.

Discussion

Socio-demographic and Personal Characteristics of Primary School Teachers:

The results in the presented study indicated that (40%) of the teachers were within the second age group (33-43) years old and (32.25%) of them were between (44-54) years old, this results agreed with a study that was carried out in Iraq, the results of this study showed that two thirds of the sample were within (36-44) years old¹¹. Regarding gender, results indicated that (80.75%) of the sample under study were females and (19.25%) were males. The findings were in accordance with study which was reported that (78%) of their studied sample were female (Table 1) ¹. Also, the results of the present study revealed that the highest percentage of teachers

(90%) were living in urban areas. The result disagreed with study conducted who revealed that half of the participants were living in urban areas ¹². Furthermore, the results of the present study found that (24%) of primary school teachers were within (16-20) years of experience. This result agreed with a study revealed that (35.8%) of their studied teachers had (16-more) years of experiences ⁹. Concerning teachers education, the study revealed that more than half of them (55.3%) were accounted to be institute graduates. The result agreed with a study which revealed that more than half of their participants were institute graduates ¹. This finding was not unexpected because in Iraq, colleges were not available in all Iraqi provinces prepare primary school teachers.

Relationship Between Teachers’ Knowledge and Their Socio-demographic and Personal Characteristics

(Table 2) indicated that there was no significant relationship between teachers’ general knowledge and

their age group in the study in which both young and old teachers had the same knowledge about communicable diseases. A study emphasized that there was non-significant relationship between teachers' knowledge and their age groups¹¹. The study indicated that there is non-significant relationship between teachers' knowledge and their gender characteristics in the study. A study found in her study there was non-significant relationship between variables in terms of the gender as they don't contribute of developing teachers' knowledge¹³.

With concern to the data study of the insignificant relationship between teachers' general knowledge and their marital status. The researcher found in that there was non-significant relationship in knowledge (Table 2). This result was inconsistent with a study found that there was non-significant relationship between teachers' knowledge and marital status¹².

The study showed that there is insignificant relationship between teachers' general knowledge and residency. Another study stated in that there was a huge connection between educators' information and their living area territory¹⁴. There is no significant relationship between teachers' general knowledge and their economic status. The result of the study may be due sharing the same knowledge from the health coordinators.

Concerning the relationship between teachers' general knowledge and their duration of services. The current study showed that there is insignificant relationship. Another study mentioned that if the teacher has five years of experience and more, they will have high level of knowledge about CDs¹⁵.

Regarding the relationship between teachers' general knowledge and their educational level. The current study showed that there is insignificant relationship.

Relationship between Teachers' Attitudes and Their Socio-demographic and Personal Characteristics

The study showed that there is no significant relationship between teachers' attitudes and their age groups, also study indicated that there is non-significant relationship between teachers' attitudes and their gender characteristics. With concern to the study data of the significant relationship between teachers' attitudes and their marital status. As well as study showed that there is insignificant relationship between teachers' attitudes and residency. There is no significant relationship between

teachers' attitudes and their economic status. Concerning the insignificant relationship between teachers' attitudes and their duration of services as shown in (Table 3). The study is inconsistent with a study which revealed that activity of teachers try to do it in their classes, the major of them were about personal hygiene, instructions to prevent buying from seller rover and there are less focusing on sexual transmission diseases⁹.

Conclusions

The knowledge of primary school teachers about communicable diseases prevention and control in terms of information were moderately knowledgeable, while teachers knowledge about general information on communicable diseases prevention and control were having good knowledge. Attitudes of primary school teachers upon communicable diseases prevention and control were agreed attitudes.

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Conflict of Interest: None to declare.

Ethical Clearance: All experimental protocols were approved under the College of Nursing and all experiments were carried out in accordance with approved guidelines.

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