# Health attitudes of school teachers 

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ABSTRACT


#### Abstract

Objective: Teachers' health attitudes are usually a reflection of their knowledge, beliefs and perceptions on health. Such attitudes could be disseminated from teachers to their pupils, who represent the fastest growing segment of the population. Health promotion in society will depend, among other factors, on this segment. School teachers therefore, should have proper attitudes and be knowledgeable with regards to health issues. The purpose of this study was to assess school teachers' health attitudes and perceptions.


Methods: This study was conducted in Bahrain during 1997 through to 1998 . A random sample of 49 schools were selected and all the teachers $(\mathrm{N}=1140)$ serving in
those schools were chosen. Information regarding their health attitudes was collected using a pre-tested questionnaire.

Results: One thousand one hundred and forty teachers with age ranging from 20-58-years responded to the questionnaire. Results indicated that teachers in Bahrain lack appropriate health attitudes and knowledge.

Conclusion: There is a need for an in service training of teachers in order to promote their health attitudes, that can reflect on the attitude of their pupils.

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Health attitudes of school teachers are usually a reflection of their background of health knowledge and perceptions. Being gatekeepers or a role model for their students, ${ }^{1}$ the teachers' attitude will reflect on their students' health practices and behavior. In Sweden, the school pupils consider their teachers as the best source of information regarding health problems such as sexually transmitted disease (STD) and sexuality. ${ }^{2}$ Among various health attitudes, the teachers' behavior during an experience of illness, how they would react and what would they do are considered factors, which enrich their attitude. Experience with illness, whether it involves the teachers themselves or the illness of a close contact, usually will furnish them with a vast experience that is related to the particular illness they have experienced or in general, a reaction towards any illness. Researchers believe that a thorough and extensive in service teacher training, would influence the teachers'
knowledge and perceptions on the importance of teaching health. ${ }^{3}$ In the United States it is reported that $95 \%$ of all children attend elementary or secondary schools. ${ }^{4}$ Therefore, schools are considered the primary vehicles for health related education in this sector of the population. ${ }^{5}$ Traditionally, teachers making themselves a key to effective implementation, provides school based curricula to students. Consequently, teacher training is regarded as essential for the effective implementation of any innovative, teacher provided curriculum in schools. ${ }^{6-10}$ Formal health education teaching in Bahrain's schools as well as in other parts of the world is lacking. ${ }^{11}$ It is also documented that University teachers' certification programs for non-health teachers often lack health as a component. ${ }^{12}$ For such reasons pupils might lack health information that could help them to enrich their health knowledge and experience. Attitudes

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and knowledge, in particular, those which are related to health could disseminate from knowing people to those who lack such attitudes and knowledge, especially from teachers to students. ${ }^{13}$ Hence, if the teachers' health knowledge is enriched it would naturally reflect in their attitudes, which later would be transferred to their pupils. It has been reported that teachers require a substantial body of knowledge and a variety of skills in order to deliver effective health education in the schools, especially in regards to sexual education. ${ }^{14}$ Students are the future generation of any society and if their health information, knowledge and attitudes are developed, it would be, without doubt, be reflected in the health of the society in general.

Methods. During 1997-1998 a random sample representing all categories of schools (primary, elementary and secondary) in Bahrain was selected ( $\mathrm{n}=49$ schools). In Bahrain, a group of health problems prevail in the society at a very high prevalence rate. Among these problems are hereditary blood diseases, of which sickle cell anemia is the most common. The Ministry of Health in Bahrain is facing a major challenge in its efforts to reduce the prevalence of such conditions. Other problems include chronic illnesses that can lead to major complications, such as diabetes mellitus (DM) with a prevalence rate of $25 \%$. Hypertension, bronchial asthma and problems related to smoking are also considered major health problems in Bahrain. All teachers serving in the selected schools were included in the study. Of the 1284 teachers, 1140 responded to the questionnaire sent to them. The questionnaire, which was pre tested for content validity, was adapted to the local language and contained sections to collect information on the school, the teachers' demographic characteristics, and their health attitudes and knowledge on the 5 most common health problems in Bahrain (sickle cell anemia, bronchial asthma, DM, hypertension and smoking). It was hypothesized that teachers were aware of such problems and would have healthy attitudes towards them. A set of 8-10 questions representing signs, symptoms or complications for those 5 health problems were listed in the questionnaire, and the teachers were asked to tick whether they agreed, disagreed, or did not know the answer. Data were analyzed using the statistical package for health sciences (SPSS) program version 11.5 and a $p$ value of $<0.05$ was considered significant.

Results. The demographic characteristics of the 144 non-respondents (11.2\%) were studied and found to be no different from the general sample population. Of the selected schools, $60 \%$ were of primary level ( $45 \%$ of the teachers), $24 \%$ were
intermediate ( $25 \%$ of the teachers), and $16 \%$ were from secondary schools ( $30 \%$ of the teachers). The teachers' age ranged from 20-58 years with a mean of 32.7 and $78 \%$ of them were married. Females accounted for $60 \%$. Some $81 \%$ had a graduate education, and $19 \%$ had completed only high school or secondary school. More females than males had higher qualifications ( $81 \%$ versus $70 \%$ ). The duration of their occupation as a teacher ranged between one and 35 years with a mean of 12.3 years. Only $13 \%$ had worked for more than 20 years. Seven percent of the teachers were smokers, who used between 2-60 cigarettes with a mean of 20 cigarettes per day. They had smoked for periods ranging between 3 and 33 years with a mean of 15 years. Smokers made up of a larger percentage of males than females $(p<0.000)(14 \%$ versus $0.6 \%)$. The percentage of smokers increased as the duration of occupation increased $(p<0.001)$. Only 14 teachers admitted to drinking alcohol, of whom all were male $(p<0.000)$. Regular exercise was practiced by only $18 \%$ of the teachers. Teachers from intermediate schools did more regular exercise than the other school teachers ( $p<0.02$ ).

Various questions were asked to elicit the teachers' experiences with illness and their attitudes and perceptions of health. The results showed that $28 \%$ of the respondents had one or more of their family members complaining of one or more types of illness. Female teachers had more family illness than male teachers ( $34 \%$ versus $23 \%$ ) ( $p<0.000$ ). And $13 \%$ of the teachers had previous admissions to hospital and that more female teachers had experienced hospital admissions than male teachers ( $72 \%$ versus $28 \%$ ) ( $p<0.000$ ). The duration of stay in hospital ranged between one and 95 days.

With regards to experience with chronic illnesses, $31 \%$ of the teachers were suffering from a chronic illness. More male teachers had chronic illnesses than the female teachers ( $18 \%$ versus $15 \%$ ). There was a significant relationship between having a chronic illness and having a family member suffering from an illness ( $61 \%$ versus 39\%) ( $p<0.001$ ). Teachers who are suffering from chronic illness were admitted more frequently to hospitals than teachers without chronic illness ( $97 \%$ versus $11 \%)(p<0.01)$. There was a significant relationship between having a chronic illness and having a good knowledge of hypertension ( $p<0.05$ ) or knowledge of diabetes ( $p<0.02$ ). Teachers with no ill family member had satisfactory views on their general health more than teachers with ill family members ( $93 \%$ versus $84 \%$ ) ( $p<0.001$ ). There was a statistically significant relationship between the duration of occupation and teachers suffering from chronic illness ( $p<0.02$ ). And finally, more teachers with a longer duration of occupation suffered from chronic illnesses than teachers with shorter durations of occupation.

Table 1-Scores obtained by the teachers for the different problems.

| Problem | $\mathbf{n}$ of response | $(\%)$ | $\mathbf{n}$ of <br> questions | Range | Mean | Median | Standard deviation |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sickle cell | 1053 | $(92.4)$ | 10 | $1-10$ | 4.88 | 5 | 1.98 |
| Smoking | 1067 | $(93.6)$ | 8 | $1-8$ | 5.28 | 6 | 1.852 |
| Asthma | 1029 | $(90.3)$ | 10 | $1-10$ | 5.16 | 5 | 2.185 |
| Hypertension | 969 | $(85)$ | 10 | $1-10$ | 3 | 3 | 1.899 |
| Diabetes mellitus | 1064 | $(93.3)$ | 10 | $1-10$ | 5.34 | 5.5 | 2.133 |

Recent illness experiences. Approximately $16 \%$ had suffered from an illness in the past 6 months. The teachers with recent illnesses were more likely to have ill family members ( $p<0.001$ ) ( $42 \%$ versus $23 \%$ ). And $55 \%$ of those who had been admitted to the hospital suffered from a recent illness ( $p<0.001$ ).
When asked on their perceptions of health, $82 \%$ of the teachers thought that their health was satisfactory, while $23 \%$ thought that the health services in Bahrain were unsatisfactory. The majority of teachers ( $88 \%$ ) who had not had any recent illness perceived their general health to be satisfactory $(p<0.001)$. Teachers who had satisfactory views on their general health usually had a better or more satisfactory views on the general health services in the country ( $p<0.001$ ). It was also found that more males perceived their general health as satisfactory compared to females ( $92 \%$ versus $89 \%$ ). Males who thought that the general health services provided in the country were more satisfactory than females ( $80 \%$ versus $70 \%$ ) ( $p<0.000$ ). Higher number of married than unmarried teachers considered health services in the country as satisfactory ( $p<0.01$ ) ( $77 \%$ versus $66 \%$ ). Perception of health was also related to the duration of occupation and it increased satisfactory views on the health services in Bahrain ( $p<0.01$ ). And more of the teachers who suffered from a chronic illness ( $95 \%$ ) and those with a recent illness ( $95 \%$ ) ( $p<0.01$ ) had satisfactory views on their general health.
Table 1 shows the scores for knowledge on common health problems obtained by the teachers who were questioned. It is clear that their knowledge was average in areas related to bronchial asthma, DM and smoking, but surprisingly poor in the field of sickle cell anemia and hypertension.

Discussion. The purpose of this study was to assess the school teachers' health attitudes and
perceptions, in light of the fact that should these characteristics be optimally present, without doubt they would enhance the teachers' health behavior and be disseminated to their pupils, and thus raising the pupils' understanding of the consequences related to poor health.
It has been reported that teachers' characteristics are important to success in facilitating students' learning. ${ }^{15-16}$ Studies have shown that the interpersonal relationships of the teacher with the pupils are the most effective teacher characteristic. ${ }^{17-19}$ Krichbaum $^{20}$ found that effective use of teachers' behavior correlated with pupils' learning outcomes.

The health experiences of the majority of the teachers in the study were limited and their knowledge on the common health problems was either poor or average. It is very worrying that school teachers are not fully aware of the problems. School teachers are considered to be important and high status members of our society, ${ }^{21}$ such deficiencies in knowledge or improper health attitudes would limit the teachers' chances of being a good health model for their pupils. Due to these factors there is a danger that pupils will not be able to acquire and adopt proper health attitudes or even gain good health knowledge. Teachers who have had personal experience of illness, either through suffering from or having suffered earlier in life from an illness, or who had a family member with an illness, knew more in the areas of DM and hypertension. Considering that both of these chronic health problems are illnesses that are common in the community, this would explain why teachers were more informed in these areas than others. The overall knowledge of school teachers in areas of the chosen common health problems was found to be average in the areas related to sickle cell anemia, asthma and DM. While it was poor in the area of hypertension, many had an adequate knowledge of the health effects of smoking. Knowing that the prevalence of these problems is
high in Bahrain and surrounding areas, it is very worrying that school teachers are not fully aware of such problems. It is not surprising therefore, if students lack information on such problems.

A very limited number of teachers had experienced situations related to their health such as being recently ill, with chronic illness, or being admitted to hospital. The majority had a positive view on their health and the general health services in the Kingdom. Although most of the teachers had a healthy life style reflected by no smoking or alcohol use, very few were engaged in doing regular exercise. Despite the fact that their numbers are small, teachers who smoke or drink alcohol might influence students' attitudes and beliefs regarding such practices. Reports have shown that poor success at school is often associated with internalized problems such as poor perceived health and a low level of exercise. ${ }^{22}$ It has also been reported that teachers not having enough knowledge of the signs of health damaging problems such as smoking and alcohol use will have difficulty in recognizing students with those habits or providing health education in such areas. Literature indicates that students are less likely to smoke in school with higher levels of teachers' discipline ${ }^{23}$ and if smoking was banned for students along without allowing teachers to do so. ${ }^{24}$ Schools usually provide a convenient environment in which to conduct programs aimed at preventing or changing tobacco usage behavior, primarily as they capture on audience which is at the highest risk for tobacco usage. ${ }^{25}$

Teachers' perceptions regarding their health and the health services in Bahrain did not have any relationship to their knowledge of common health problems. This finding was supported by other studies, which found that teachers' health beliefs are not linked to whether teachers have courses in health generally. ${ }^{26}$

Considering that children and adolescents constitute the major bulk of the population in the developing countries, it is very important that their health attitudes, knowledge and practices are raised in order to help in raising the health status of society. Adequate preservice preparation on health for teachers is essential. It has been reported that teacher training conceptualized as a behavioral exchange process and including explicit teacher motivation components can promote effective implementation of behavior change curricula in public school classrooms. ${ }^{25}$ It should be emphasized that it is dangerous to depend on teachers to transfer health attitudes and knowledge to their students without proper training. School teachers therefore, need continuous pre and in service health training in order that they are ready to disseminate such practices to their pupils. Although
they may not be given the prime responsibility of health education, certainly they should share it.

Teachers are encouraged to integrate health content into their classes regardless of specialty area, and to assist students who experience health problems, and provide early identification and intervention when a student experiences a health problem. ${ }^{3}$ The teaching institution must also provide opportunities for the teachers to maintain adequate health knowledge and an optimal health attitude.

Recently, in Bahrain and around the world there has been much cooperation between the Ministries of Health and Education aiming to raise the health status of students and teachers. For students to realize the benefits of such behavioral changes, disease prevention programs must be implemented effectively in their curriculum. ${ }^{25}$

Thus, it is recommended to implement a future study measuring the relationship between teachers' professional competence and their students' learning outcomes and to assess the students' health knowledge and attitudes.

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