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Evaluation of Health Promoting Schools Programme in Saudi Arabia

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Abstract

Background: The health-promoting school (HPS) is a WHO-sponsored framework. This national study aimed to explore the experiences and progress in implementing the HPS programme in Saudi Arabia (SA). **Methods:** A self-completed postal questionnaire was sent to all 42 school health departments across SA, and the response rate was 100%. **Results:** Forty respondents (95%) had implemented the HPS programme. Over 400 schools were involved in the HPS programme of which two-thirds were primary schools. The most common activities addressed were health education activities. Less frequently mentioned were healthy school policies, action on the social environment, and developing links with the community. Evaluation was only through internal processes. The main perceived strengths of the HPS were increasing the awareness of students and school staff and improving the school's physical environment. The main weakness was the lack of legislation and financial support. For further development, the respondents reported the need for financial and human support. **Conclusion:** This study highlights the growth of the schools participating in the HPS programme. Further research is needed to develop and fully evaluate the effectiveness of the HPS framework in SA.

Keywords: Health Promoting School, Health Promotion, School Health

1. Introduction

Major advances have been made recently in finding the most appropriate and successful solutions for meeting the health needs of populations (Denman 1999). The growth of a new public health movement and the policies of the World Health Organization (WHO) have played a major part in pushing the boundaries of practice (WHO 2001). The WHO European Conference in Scotland in the early 1980s advocated for the health-promoting school (HPS) as an effective approach to health promotion in the school setting (Rogers et al. 1998). The Ottawa Charter in 1986, the Jakarta Declaration in 1997, and the Recommendations of the WHO Expert Committee on Comprehensive School Health Education and Promotion in 1998 provided the foundation for WHO's Global School Health initiative (WHO 1998). The goal of WHO's Global School Health initiative (1998) is to increase the number of schools that can truly be called "Health Promoting Schools". A health-promoting school (HPS) is defined as a school constantly strengthening its capacity as a healthy setting for living, learning, and working (WHO 1998). The essence of the HPS approach is not blaming the victims for their own health problems. Instead,

it attempts to prevent problems and promote well-being through providing an environment that facilitates health development and influences the vision, perception, and action of all in that particular setting (Dooris 2006; Gray et al. 2006). Furthermore, the health-promoting schools embody a holistic, whole school approach to personal and community health promotion within the school setting (Parsons et al. 1996).

The WHO regional network for the development of health-promoting schools may be the world's most comprehensive and successful international effort to mobilise support for school health promotion. The European Network of Health-Promoting Schools (ENHPS) was the first network launched in 1991 (WHO 1993). It was run and funded by a partnership of the European Commission (EC), the Council of Europe (CE), and the WHO Regional Office for Europe. Other networks such as the Australian Health-Promoting Schools Association was begun in 1992, Western Pacific in 1995, Latin America in 1996, and South Africa in 1996. In both the US and Canada, the Comprehensive School Health Program (CSHP) approach is used more frequently than the HPS concepts (Deschesnes et al. 2003). In many areas "Healthy School Award" schemes have been set up to support the development of health-promoting schools. In the UK, health-promoting schools initiatives have been established by collaboration between local education services, health authorities, and health trusts to encourage schools to become more health-promoting. This initiative recognises schools that are trying to develop in line with the health-promoting school criteria (Lister-Sharp et al. 1999).

Rogers et al. (1998) conducted a national survey aimed at determining the extent and nature of existing Healthy Schools Awards in the UK and how they were being evaluated. They concluded that there has been significant growth in Healthy Schools Award schemes in recent years. This is an indication of a growing consensus amongst professional in education and health sectors about the value of the health-promoting school concept and award scheme as an acceptable method.

Lister-Sharp et al. (1999) conducted a review to evaluate the effectiveness of school-based health promotion interventions. The HPS framework had an impact on the social and physical environment of schools in terms of staff development, school lunch provision, exercise programmes, and social atmosphere. There was evidence that the framework is able to impact positively on aspects of mental and social well-being, dietary intake, and fitness. However, the HPS framework failed to demonstrate effectiveness in all studies included in the review. Lister-Sharp et al. (1999) concluded that the health-promoting school initiative as a new, complex, and optimum method of evaluation is currently under debate.

Stewart-Brown (2006) conducted a systematic review to evaluate the effectiveness of the HPS framework and school health promotion programmes in improving the health and well-being of students. He concluded that school-based programmes promoting mental health were effective in improving young people's health, particularly if developed and implemented using approaches common to the health-promoting schools, such as the involvement of the whole school, changes to the school psychosocial environment, personal skill development, involvement of parents and the wider community. Stewart-Brown (2006) concluded that the effectiveness of different types of programmes varies. School-based programmes that improve conflict resolution and reduce violence and aggression were among the most effective. Suicide-prevention programmes showed evidence of beneficial effects for suicide potential, but the less rigorous studies also identified negative/harmful effects in young males. Moreover, this review confirmed the findings of previous reviews that programmes on preventing substance use are among the least effective of school health promotion programmes. At best, those programmes delay the onset of drug use and reduce the quantity of drugs consumed. In addition, Stewart-Brown also highlighted that the school health promotion programmes that are effective in changing young people's health or health-related behaviour were more likely to be complex, multifactorial, and involve activity in more than one domain (curriculum, school environment, and community). These are features of the health-promoting school framework, and to this extent these finding endorse such approaches.

Lee et al. (2006) assessed the effectiveness of HPS in Hong Kong by comparing schools that had comprehensively implemented the HPS framework with schools that did not reach the standard of HPS. He found that students in healthy schools were better off in terms of self-reported health status and academic achievements. The findings highlighted the importance of healthy policies, empowerment, capacity-building, creating supportive

environments and partnerships to implement the health-promoting schools successfully. In addition, the findings of this study added further evidence to previous studies suggesting that the concept of a whole school approach in tackling health and social issues would improve learning outcomes.

Malikaew et al. (2006) argued that an HPS provides an ideal framework for developing effective oral health promotion through implementation of a range of policies and actions addressing common health risks and conditions. Moreover, Moyses et al. (2003) concluded that children in health-promoting schools had better oral health than children in non-supportive schools.

The HPS programme in Saudi Arabia was adopted in 2002 and passed two stages. In the first stage, the Administration General of School Health (AGSH) introduced the HPS programme to school health departments in the regions through several workshops and meetings (AGSH 2002). The second stage started in 2003, when regional departments of school health implemented the programme in one of their schools as a pilot. The most important achievements from the pilot stage were locating supervisors for the programme in each region and selecting HPS teams in the schools that implemented the programme. The total number of schools involved in the pilot stage was around 72 (AGSH 2006). In addition, the HPS award scheme was set for the regional development of the programme, and it consisted of three stages. In the first stage: preparation for recognition; second stage: evaluation of the activities; and third stage: accreditation and award. This scheme covered eight key areas: school health services; school health education; school health environment (physical, psychosocial); health promotion for school personnel; health promotion for the community; nutrition and food safety; physical education and recreation; mental health, counselling, and social supports.

The experience of Saudi Arabia in this programme is limited; therefore, the need to explore its successes and constraints is important, especially as there were no studies assessing the trend and progress in HPS development. The aim of this study is to explore the experience and progress of the national HPS programme from the perspective of the programme supervisors in school health departments for boys' schools in Saudi Arabia.

2. Methods and Materials

A national cross-sectional observational study was carried out to collect qualitative data. A validated self-completed postal questionnaire was used. The questionnaire consisted of six pages (size A4) with a separate covering letter. The covering letter highlighted the purpose of the study, ethical approval, and the confidentiality of the answers. All of the questions were open-ended. The questionnaire collected information about the extent and nature of the programme, activities being undertaken and how they were evaluated, school management response to HPS initiatives, HPS resources and materials, strengths and weaknesses of the programme activities and tackling problems, the plan to develop the programme, and the support required in the next five years. The questionnaire was sent officially by post to the supervisors of HPS programmes in the 42 educational regions, and they returned it by post or fax to the researcher. The period for collecting data was from April to June 2007.

3.1. Analysis

All the questionnaires were given a number from 1 to 42. The responses were listed, grouped, categorised by theme, and coded according to the guidelines for qualitative researchers (Malterud 1993).

3. The Results

All HPS supervisors in each educational region ($n = 42$) participated in the study, and all of the questionnaires were returned and filled. The respondents were asked whether the HPS programme existed, and the majority reported yes 95% ($n=40$), whereas only 5% ($n=2$) reported no. More than half of the regions 65% ($n=26$) started the programme in 2003. When asked to explain the reasons for the programme's absence, the following reasons were given: there was no financial support, and shortages of staff and material resources existed. The majority of schools were primary schools 65% ($n=306$), 21% ($n=99$) were intermediate, and 14% ($n=66$) were secondary schools (Table 1).

Table1: Number and types of schools involved in HPS programme.

Type of school	Number involved	Percentage (%)
Primary (6-12 y old)	306	65
Intermediate (12-15 y old)	99	21
Secondary (15-18 y old)	66	14
Total	471	100

The Health Promoting Schools activities

Healthy school policies

With regard to healthy school policies, a minority of respondents mentioned healthy policies in schools. For example, one respondent (no. 11) stated that “there were few health policies related to comprehensive health education programme, safe school environment, strengthening the concepts of HPS and activating the physical activity programme for student.” The majority of respondents reported that schools implemented a group of health education programmes such as diet and milk programmes. Furthermore, they stated that schools adopted the Healthy Canteens policy by applying the healthy standards from the Ministry of Education.

School’s physical environment

The majority of the respondents stated that the inspection of a school’s environment programme was based on observing and monitoring the environment by the HPS programme supervisors (Table 2). They also mentioned periodic visits to check the safety of the school environment such as its drinking water and the cleanliness of the toilets. On the other hand, some respondents mentioned that many of the schools occupied unofficial buildings such as villas, which constrained fulfilment of healthy physical environments.

Table 2: Common weaknesses and problems of the HPS programme.

NO	ITEM
1	Not enough financial support for schools
2	Poor infrastructure for majority of schools
3	Not enough health education messages in curriculum
4	Absence of practical guidance for schools
5	Lack of incentives and rewards for schools and teachers
6	Increasing burden on teachers and schools

School’s social environment

The majority of the supervisors mentioned that the health educational programmes were aimed at improving the health and social relationships between students and teachers. The respondents also reported that there were central policies from the Ministry of Education to control the relationships between the students and the teachers in the schools.

Community links

The majority of the supervisors stated that the HPS initiated the periodic meeting with the parents of the students and involved them in decisions related to the development of the education and health of the students. However, three respondents (no. 7, 6, and 38) stated that “the link between the HPSs and the community was neglected.”

Links with health care services

The majority reported that the services such as basic vaccinations, inspection of new students, and creating a medical record for each student, in addition to providing curative and emergency services, were provided by school health care units and primary health care centres.

Resources and materials of HPS programme

The majority of respondents reported that the resources and materials available were not sufficient.

Evaluation of HPS activities

The majority of the respondents reported three ways of evaluating the HPS activities:

- a. Periodic visits by the school health department supervisors to the participating schools. These visits included inspection of improvements in the physical environment and other activities such as health services and links with the community. The aim of these visits was to evaluate the activities and relevant achievements, as reported by the respondent (33).
- b. The school programme teams used pre- and post-questionnaires to assess the improvement in knowledge and attitude of the students. In addition, they observed changes in the social environment, for example, the number of reductions in violence cases between the students.
- c. Special reports of the HPS programme covered all activities in each part of the programme. For example, in the physical environment there are indicators such as the presence of enough rubbish baskets and the cleanliness of the classrooms and playgrounds. The programme supervisors completed these forms at the end of each academic semester. For example, one respondent (2) stated that “there were no sufficient number of toilets (8 toilets for 100 students) and sufficient number of fire extinguishers.”

However, there was no clear mechanism for evaluation, with several limitations on the evaluation in some areas, such as school social environment, healthy school policy, and links with the community. For example, four respondents (38, 22, 17, and 19) did not complete the questions on how to evaluate the following activities: links with community, school social environment, and links with health services. When asked how to evaluate school social environment, one respondent (31) stated “giving grade from zero to five.” One respondent (24) mentioned only evaluation of the programme action plan. Another respondent argued that there was a need for external assessment to evaluate the activities of the HPS.

Strengths and weaknesses of the HPS activities

Positive strengths

The respondents stated that the HPS improved student and teacher awareness and behaviours. In addition, one respondent (no. 41) reported that the programme helped the constancy of students’ healthy behaviours. The majority of respondents reported that the programme improved the schools’ physical environment, students’ meals, a safe playground, and cleanliness of the buildings. Furthermore, collaborations between school communities and students’ families increased in schools that participated in HPS compared with nonparticipants. Some of the respondents reported that the canteens provide healthy meals. Some supervisors stated that there was a reduction in violence and bullying among students. One respondent (no. 40) stated that “schools became more attractive in learning.” Moreover, the respondents reported that promoting the health of the school’s community became a top priority of the schools’ managers, and the collaboration between school health units and schools was improved.

Weaknesses and problems from respondents’ perspectives

Table 2 summarises common weaknesses and problems reported by the respondents. The majority of the respondents reported that there was the need for financial support in order to implement the HPS programme. Furthermore, the majority expressed the need for incentives and rewards to encourage schools to participate in the programme.

They mentioned that there was a need for more teacher training and reducing the educational responsibilities of teachers who participated in the programme. The respondents reported that there was a need for more guidelines and reference sources that explained HPS concepts and evaluation processes. In addition, they added that there was a need to increase the participation of local communities and families in planning and evaluating the programme. The majority of respondents also reported the need for sharing experiences among regions through annual meetings. They stated that a clear vision and strategic planning were essential on the national level. They mentioned that there was a need for health personnel (nurses) in the schools,

Future plan and opportunities of the HPS framework

The majority of respondents reported that they planned to provide financial resources through private sector sponsorship, as well as incentives and rewards for schools to participate in the programme. Moreover, some supervisors planned to build a website for HPSs in their region to provide information and share experiences

among schools. In addition, they planned to improve the activity evaluation processes. Some supervisors planned to improve the canteen's health standards in order to improve the students' meals. However, one respondent (no. 3) stated that "we receive guidelines from Administration General of School Health and our role is to implement not to plan."

Types of support

The majority of respondents reported three types of needed support: financial, human, and administrative. Financial support included providing an annual budget for the programme and incentives for teachers. Human support included having health educators (nurses) in each school. Administrative support included rewarding and encouraging supervisors, teachers, and school managers. Finally, the majority of respondents expressed the need to assure a high commitment from all partners in this programme.

4. Discussion

This was a national study covering all school health departments in the 42 educational regions that are responsible for the implementation and development of the HPS programme in Saudi Arabia. It indicated that there had been significant growth in the enrolment of schools in HPS since 2003, with a majority of the regions (95%) implementing the programme. However, there was a disparity in the timing of the HPS implementation among the regions without a clear justification. Over 400 schools are involved in the HPS programme, with the two-thirds (65%) implemented in primary schools. However, there was a wide disparity in the number of HPS schools among the regions.

The study highlighted the extent of HPS activities, although the results do not provide clear evidence that there is considerable investment in this approach. Similar results were found in the study by Rogers et al. (1998), which aimed to determine the extent and existing Healthy School Award in the UK.

There are many dimensions to a health-promoting school, and the main goal is enhancing the health status of the pupils and school staff. This can be achieved by building a healthy school policy, changing the social and physical environment, developing personal skills and involving parents and the wider community. The results indicated that no schools were able to cover all areas of the HPS framework at the same time. This was found in other studies (Deschesnes et al. 2003; Lister-Sharp et al. 1999; Rogers et al. 1998). The HPS framework was built on previous health education programmes that included the provision of health information on specific topics, such as healthy eating and smoking. Moreover, these activities in general are isolated and are not clearly connected in the HPSA scheme. The school physical environment is given high priority in the HPS programme owing to the need for its substantial improvement. This finding was similar to another study in Hong Kong (Lee et al. 2006). However, more than one-third (38 %) of the public schools occupied private buildings that were not a suitable environment for education. Therefore, schools in private buildings constrained the expansion of the HPS programme.

There were limitations in the implementation of some aspects of the HPS programme such as healthy school policy and school social environment. The reason is that these two concepts were not included in the key activities of the HPSA scheme. Other key aspects of the health-promoting school concept that received less attention were developing links with community and health care services. In general, HPS activities have been implemented as a traditional health education model. The health-promoting schools approach needs further attention and development.

Regarding the evaluation of HPS activities there was a clear limitation, as it depended only on the reports and regular monitoring visits of the physical environment of the schools. There was no time scale for the evaluation; the main method was internal assessment by the HPS teams in the schools. The multifaceted, complex nature of the health-promoting school poses a considerable challenge for evaluation. Indicators of achievements in all areas need to be addressed and fully specified in order to derive appropriate measures. In addition, the evaluation is necessary to provide evidence that the HPS framework is implemented as an integrated set of components.

The Health-Promoting Schools Award (HPSA) schemes have been set up to enhance the implementation and the development of the concept of health-promoting schools. In the KSA, the key area of the HPSA scheme was more

likely to be a comprehensive school health programme (CSHP) rather than an HPS framework, and the scheme had no clear effect on the schools.

The lack of administrative, financial, and human support from the upper sectors involved in the HPS was considered the main weakness. These problems were mentioned in another study conducted by Lister-Sharp et al. (1999). The lack of financial and human resources for essential school facilities undermines the whole school approach. In addition, the lack of practical guidance for schools was reported as a common weakness. Practical guidance is an essential resource for schools to implement the programme; for example, in the UK the national healthy school status was a guide for schools which targeted school management. It aimed to outline the National Healthy School Programme, introduce the concepts of national healthy school status, and describe the benefits of becoming a 'Healthy School' (DoH 2005). The political commitment, upstream policies, and support of policy makers are essential for successful implementation of the HPS framework.

There is increasing awareness of students and the need to improve the physical environment of schools. Similar findings are found in other studies (Lister-Sharp et al. 1999; Mitchell et al. 2000; Moon et al. 1999).

This study was the first national survey conducted to assess the health-promoting school framework across the Kingdom of Saudi Arabia. The responses provided recent data on the experience and progress of the health-promoting schools from the perspectives of the programme supervisors in school health departments in the 42 educational regions. Much information was collected on different aspects of the HPS framework that provided a clear view of school experiences in the programme.

The study used a self-completed (postal) questionnaire method for collecting the data. Telephone interviews or follow-ups with the participants were not possible to collect more information on certain questions.

5. Conclusions

The aim of this study was to explore the experience and progress of the national health-promoting schools programme in Saudi Arabia from the perspective of the programme supervisors. Key findings highlighted significant growth in schools participating in the programme. The common theme of the HPS programme was a traditional health education model with fewer health promotion interventions. Healthy school policy was not included in the key components of the Health-Promoting School Award scheme, and the school social environment was rarely involved in the programme. The lack of financial and human support was considered the main weakness of the HPS programme. There were clear limitations in the planning and evaluation of HPS activities. The future of HPS looks promising. Further studies are needed to evaluate the effectiveness of the HPS framework.

Ethical approval

The Ethics Committee at Ministry of Education approved the study.

Conflict of interest

The author declare that he has no competing interests.

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