



**ASSESSING HEALTH PROMOTION ACTIVITIES THROUGH SCHOOL HEAD
MASTER'S PERSPECTIVES: CROSS SECTIONAL DESCRIPTIVE STUDY OF CBSE
SCHOOLS IN INDIA.**

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ABSTRACT

Purpose: With the advent of Health Promoting Schools (HPS) concept worldwide, theoretical framework of HPS is observed with CBSE schools of India since 2007. This study aimed to describe current general & oral health promotion activities/policies in CBSE schools of Maharashtra state. Considering socio-economic and geographic differences, it is hypothesised that private CBSE schools are more likely to report health promoting activities (HPA). **Methods:** A cross sectional survey was conducted with school headmasters of all public and private CBSE Schools in Maharashtra State (n =156). A validated postal questionnaire addressing socio-demographic characteristics, HPS components - physical environment; school health policies; health services; personal health skills; social environment; community relationships; nutrition services, health promotion for staff, oral health promotion and action plan was used. A pilot study was conducted in 15 CBSE schools of two neighbouring States. Data analysis included descriptive statistics and Chi-square test. The level of significance was set at 5%. **Results:** The response rate was 77.56% (N=121), including 32 (74.41%) public and 89 (78.76%) private CBSE schools. Action plan of HPS was present in 57.9% (70) schools and oral health education was 100% (121). Statistically significant (P value ≤ 0.05) difference noted among public and private schools for family income, school health policies for substance abuse, healthy tuck shop and food availability. **Conclusions:** The socio-economic and demographic aspects cause HPA implementation difference among public and private CBSE schools which needs attention and further research. Allocating equal HPA programmes is essential to address such disparity.

KEYWORDS: School health, Health promotion, Health education, Oral health, Prevention, Health promoting schools.

INTRODUCTION

Recent data indicate that around 66% of primary school and 59% secondary school children in India suffer from at least one chronic disease. As the population of 5 to 18 years old age group constituting 38% of the total population (1.18 billions) is increasing, the burden of oral disease is expected to aggravate^[1] unless preventive measures are available. Prevention and health promotion are necessary to address the burden of diseases among children. The concern mounts to achieve this by harnessing different health determinants, as traditional health education and awareness alone are not sufficient to solve this issue.^[2] Evidences explored that school, as a health promoting setting can play a vital role to empower each member of school and the community partners to increase control over, and to improve their health.^[3]

The health promoting schools (HPS) concept evolved in 1950s and is advocated by the WHO, UNICEF, international organizations, policy makers and

researchers.^[4,5,6] They increasingly embrace health promotion initiatives in school as a priority setting in health promotion because it meets young people during formative years of their development and may have the last for rest of life.^[7] WHO defines a health-promoting school as —one that constantly strengthens its capacity as a healthy setting for living, learning and working.^[8] Further to advocate, WHO has produced an "Information Series on School Health" and explained the eight components of health promoting schools.^[9,10] Various systematic reviews pioneered different aspects of health promotion in schools such as positive educational outcomes, reduction in substance abuse, improved physical activity and mental health.^[11,12,13] It is believed that a broad health education curriculum along with the supportive environment and ethos of the school helps to build up the personal, cognitive and social skills which determine the ability of individuals to gain access to, understand and use of information to promote and maintain good health.^[14,15,16] Oral health, being an

important aspect of general health can be addressed in HPS if targeted activities are in place.^[17] Examples of health promotion activities to improve oral health of the children are safe playgrounds, school ethos for violence control, school water fluoridation, school policies on control of risk behaviours, such as intake of sugary foods and drinks, tobacco use and alcohol consumption.^[18, 19]

The Central Board of Secondary Education (CBSE) schools in India have recognised the importance of implementing health promoting policies and activities with Comprehensive School Health Programmes launched in 2007.^[20] They have started with health and wellness club, yoga, physical activities and many such health promoting activities. However, practical execution of these activities may be subjective to school to school, socio-economic and demographic factors. Health promotion is a planned activity, based on analysis of the school's current situation, a needs assessment of its population: pupils, staff and parents, current school health policy and action and resources available.^[21] Being private or public school is a proxy measure for socio-economic environment and may impact on the school's competency to implement different health promotion activities. Hence, this study has been conducted to understand and acknowledge the nature and extent of current Health promoting activities and policies, motivational factors and barriers to implement them and scope for oral health promotion in school setting among CBSE schools of India.

The aim of this study was to assess current health promotion and oral health promotion activities and policies in CBSE Schools in Maharashtra State (India) according to the school headmaster's view. The objectives were

- To describe the socio-demographic characteristics of CBSE schools according to headmaster's view in Maharashtra State.
- To describe health promoting activities according to each HPS components and oral health promoting activities included in CBSE schools in Maharashtra State.
- To describe the variation among the private & public schools and also school environment in relation to oral health promotion activities.

METHODOLOGY

This study had ethical approval from Queen Mary University of London Ethics committee and the official permission from the Chairman and Education officer of The Central Board of Secondary Education (CBSE) schools board in India.

Subjects and Sampling: A cross sectional descriptive survey was conducted to assess the health promoting activities that could influence general health and oral health in schools.^[22] There were 156 schools identified in

the State of Maharashtra from which 43 are public and 113 are private CBSE Schools. As there were no previous studies done related to HPS in CBSE Schools to know the prevalence of health promoting activities and being the first study of its kind involving these schools India, the researcher included all the 156 CBSE schools from Maharashtra State in the study. A valid self completed postal questionnaire along with letter of invitation and consent were sent out to all school headmasters.

Two relevant questionnaires were selected to include in this study.^[23,24] The questionnaire was divided into three main parts: 1) the socio-demographic characteristics that have impact on health, 2) school activities related to main components of HPS and 3) the oral health promoting activities.

A pilot study was conducted in 15 CBSE schools (10% of total sample size) two neighbouring states of Maharashtra, Karnataka and Chhattisgarh, have similar demographic features. The participation was voluntary with informed consent and questionnaires collected without identifiers to ensure confidentiality.

The data analysis was conducted with the Statistical Package for Social Sciences software (SPSS, version 17). Descriptive statistics was performed and Chi-square test was used to assess whether or not private CBSE schools were different in implementing health promotion activities in comparison to public CBSE schools. The level of significance was set at 5%.

RESULTS

The response rate for pilot study was 100% with satisfactory understanding of questionnaire by school headmasters. Later, all 156 CBSE schools (public and private) in Maharashtra were invited to participate in this study. Total 121 schools replied with filled questionnaires, giving a response rate of 77.56% [private 78.76% (89/113) and public 74.41% (32/43)]. The results related to each objective were as follows:

Objective 1:

- Male: Female students = 1:1; Student: Teacher = 27:1
- The total number of students per school showed to be normally distributed with a mean of 1475.0 (95% CI 1154.0, 1796.0)
- A student travels 4.2 miles; 68% schools provide transport services.
- Sixty-eight (56.2%) school headmasters reported that in their schools few children had adult supervision after school hours.

Objective 2

The table 1 describes which health promoting activities were seen in these schools.

Table 1: Health promoting activities observed according to HPS components in CBSE schools of Maharashtra State of India.

HPS Components	Present	Absent
School health policies	✓	---
The physical environment of the school	✓	---
Health service	✓	---
Personal health skills	✓	---
The school's social environment	✓	---
Community relationships	---	✓
Health promotion for school staff	---	✓

Objective 3

Statistically significant differences regarding following health promoting activities/policies implementation were

observed among private v/s public CBSE schools. The private schools were more associated with such activities than public schools as shown in table 2.

Table 2: Health promoting activities/policies implementation observed among private and public CBSE schools in Maharashtra state of India.

Health promoting activities/policies	P value
Parental supervision after school	0.05
Sanitation and play-ground facility	0.05
Tobacco/Alcohol related policies	0.02
Parental approach by school	0.031
Health service provision	<0.001

The following outcomes were reported by headmasters after implementing Comprehensive school health programmes, in table 3:

Table 3: Health and educational outcomes reported by Headmasters of CBSE schools in Maharashtra state of India.

	Increased N (%)	Remained Same N (%)	Decreased N (%)
Health Outcomes			
Infections	0	111 (92)	10 (8)
Nutrition	108 (89)	13 (11)	0
Exercise	109 (90)	12 (10)	0
Mental Health	91 (87)	14 (13)	0
Educational Outcomes			
Absenteeism	0	11 (13)	110 (87)
Drop out	0	1 (1)	121 (99)
School Failure	0	76 (99)	1 (1)

Explicit Oral health promoting activities in CBSE schools are followed in traditional manner, which has less impact on oral health. Except oral health education programmes, dental trauma advice, oral health treatments like fluoride application, sealants to prevent caries were absent.

DISCUSSION

On the whole, this study shows positive establishment of HPS activities and policies in CBSE schools. With the implementation of Comprehensive school health programmes (2007), the CBSE Schools has covered major aspects of health promoting activities and policies. These schools have a high awareness and health education programmes alcohol/tobacco/drug abuse, healthy and alcohol/tobacco-free school environments, together with supportive organizational and management

structures, help reduce stress and promote healthy living.^[20]

The Global Youth Tobacco Survey in 15 Indian States revealed that 87.5 % (median) students of 13-15 years have purchased tobacco products without restrictions and about 80 % of students were exposed to tobacco advertisements in various media. The Government of India (1999) legalised the sales of tobacco, alcohol and substance like drugs are banned in 100 meter area surrounding the schools, which is followed in these schools.^[25] The 78 (64%) CBSE schools receive voluntary support from their student's parents, who is doctor/dentist for annual health check up. This is a very good example of building community relationships and suggestive of a cost-effective way of implementing health promotion in school's settings.

The study hypothesised that private schools have better compliance to health promotion than public schools seems to be true in certain aspects. This study found statistically significant association ($P < 0.001$) between public and private CBSE schools and the family income of the students, suggesting better facilities coming with better funds and resources to private schools. The school health policies for alcohol and drug related incidents were more associated with private schools than public schools which was statistically significant (P value = 0.020). Wells and his colleagues^[26] argued that mental health outcomes in school children are effectively achieved with the health promoting activities held within the social environment aspect. Similarly, in this study, the prevalence of mental health outcomes is statistically significantly (P value = 0.044) associated with the private CBSE schools than public CBSE school with the implementation of Yoga, health counselling under Comprehensive school health programmes (2007). Parents can be trained to reinforce general and oral health messages at home and act as facilitators in outreach programmes for children as a part of community relationships.^[18] In this study, statistically significant (P value = 0.031) association was found between parental participation in school meeting and programmes and type of school. Private schools were more proactive in this activity than public schools. Government of India has launched Mid-day meal scheme in all public schools.^[27] The teachers and other staff are given responsibility to prepare meals for students on pro rota. However, very few private schools provide food in their schools while maximum public schools food to students.

As noted by some of the CBSE School's headmasters views in the study, oral health activities and policies were present, but were limited to the oral health teaching, screening and tooth-brushing programmes. As there were no guidelines mentioned in CSHP (2007) of CBSE schools, oral health is not considered as separate diseases.

Due to lack of a structured questionnaire addressing components of HPS, appropriate measure scale and statistical analysis, the authors has searched the scientific literature and combined two available questionnaires. Reporting bias due to giving socially desirable answers and lack of recall are frequently encountered in self completing questionnaire.^[28] Thus, the frequency of school headmasters reporting inadequate state of physical environment components like sanitation, electricity may have been underestimated, due to favouring socially desirable answers or the fact that headmasters were reluctant to express negative opinions and attitudes.

CONCLUSION

In terms of implications, according to headmasters, CBSE schools are actively involved in planning & promoting healthy activities in schools. In practice, the school headmasters would be made more aware with

their shared vision in planning and management to create lasting improvement in school health promotion.^[29] The CBSE's CHSP needs to be consulted to build healthy policies and linkages to include oral health programmes. The legislation of smoke-free school surroundings by Indian Government is a good example of oral health promotion policy. Perhaps, in same context, emphasis is needed to legitimise the National guidelines to address oral health promoting activities and policies in schools to prevent the prevalence of oral diseases and its negative impact. The comprehensive school health programme initiative of CBSE would be more appreciable when address the socio-economic and demographic gap between public and private schools. The schemes by Government of India, like food in school and right to education can foster educational and health equity in children. As limited studies are present related to HPS concept in India, it is important to establish a research that would identify the scope for health promotion and oral health promotion policies and activities in these schools. Health promoting schools (HPS) concept is developing in India to address public health problems among children such as malnutrition, obesity, sexual health, smoking, mental illness and injuries. This is the first study assessing the current status of HPS in India, which is crucial to its future development and sustainability.

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