

Original Research Article

COMPARISON OF SCHOOL HEALTH SERVICES AMONG PRIVATE AND GOVERNMENT SCHOOLS OF BELGAUM- A CROSS SECTIONAL STUDY

Comment [DKA1]: Owned

ABSTRACT

Introduction: Children are the creators and the shapers of tomorrow and school marks an important early milestone in the child's life long journey of intellectual and psychological development.

Objective: To assess the school health services in government and private schools of Belgaum.

Methodology: This cross sectional study was conducted at 3 Primary Health Centres and 3 Urban Health Centres in Belgaum. All the government and private schools were selected and necessary data of child school health services was collected based on criteria recommended by Indian Academy of Pediatrics.

Results: 53.76% of schools provided hygienic drinking water, 64% of the schools did not have adequate toilet facilities, 30% of schools did not have adequate ventilation and lighting, 34.40% of schools did not have playground and 90% of schools did not have safe and proper transportation facility. When private and government schools were compared private schools were better in providing services like safe and proper transportation, properly ventilated and illuminated class rooms, where as kitchen facility was available more in government schools($p < 0.001$).

Conclusions: We found that none of the schools met all the 10 commandments. Although 50% of them followed 4 to 5 criteria.

Key words: School health services, private schools, government schools, Indian Academy of Pediatrics.

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37 ORIGINAL ARTICLE

38 1. INTRODUCTION

39 Children between the ages of five-seventeen years are school children and they constitute nearly 20-25%
40 of population.^[1, 2] They are the creators and the shapers of tomorrow and school marks an important early
41 milestone in the child's life long journey of intellectual and psychological development. So, school and its
42 immediate environment must offer basic minimum standards to encourage and facilitate the main
43 objectives of child friendly school.

44 The challenges in education are not simply getting children into school, but also improving the overall
45 quality of schooling and addressing the threats to participation. The growing school children are
46 vulnerable to communicable disease such as Tuberculosis, Rheumatic fever, diarrheal diseases as well
47 as non communicable diseases such as malnutrition, dental, visual and hearing defects etc.^[3] So, school
48 health services should provide need based comprehensive services to students, teachers and other
49 personnel in the school to promote and protect their health, prevent and control the disease and help
50 them to maintain their health.

51 Unfortunately, schools are not well organized in our country because of peculiar rural and economic
52 problems, non availability of medical personnel in village ever growing member of schools and such other
53 conditions. Hence the present study was planned to assess the school health services in government and
54 private schools of Belgaum.

55 2. MATERIALS AND METHODS

56 2.1 STUDY DESIGN- The present study is a Cross Sectional Study

57 2.2 STUDY PERIOD-September 2013 to June 2014

58 2.3 STUDY AREA-Study was conducted in three primary health centres (Kinaye, Handignur,
59 Vantamuri) and three urban health centres (Ramnagar, Ashoknagar, Rukmininagar) which come under
60 the field practice area of Department of Community Medicine Jawaharlal Nehru Medical College
61 Belgaum.

62 2.4 STUDY SETTING-All the schools under the study area that is 133 schools under the three primary
63 health centres and 53 schools under the urban health centers of field practice area of Department of
64 Community Medicine Jawaharlal Nehru Medical College Belgaum were chosen for the study.

65 Informed consent and permission was taken from the Heads of the school for the study. Assent was taken
66 from all the study participants.

67 2.5 STUDY VARIABLES-Parameters such as location, classroom, ventilation and lightening, water
68 supply, latrine, urinals, availability of eating facilities, availability of first aid, play ground were assessed.
69 The information was obtained by enquiring school authorities and by inspection of school premises.

70 2.6 STUDY INSTRUMENT-Pretested and predesigned questionnaire was used. The questionnaire
71 was designed based on criteria recommended by IAP (Indian Academy of Pediatrics).^[4,5]

72 The criteria for assessment of school health services were:

73 1) No physical punishment

74 2) No excess baggage

75 3) Safe and proper transportation to school

Comment [DKA2]: The background to the study is too scanty.

Comment [DKA3]: What about social development?

Comment [DKA4]: What are they?

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Comment [DKA6]: Even when the health is poor?

Comment [DKA7]: General statement

Comment [DKA8]: What is your source? If this is your deduction, you have to state or show evidences. However, the problem statement is not well teased out.

Comment [DKA9]: Why is it cross sectional? Is cross sectional a research design?

Comment [DKA10]: How did you select the study area? What sampling technique did you use?

Comment [DKA11]: This is your population. What about your sample? How many of these schools participated in the study? How did you select the participating schools as well as the participants?

Comment [DKA12]: How?

Comment [DKA13]: What is the name of the questionnaire? How many items therein? How many point scale is it? What is the psychometric property of the instrument?

- 76 4) Hygienic drinking water
- 77 5) Clean kitchen or a place where children can bring and eat house food
- 78 6) Minimum 4 games periods in one week
- 79 7) Properly ventilated and illuminated class-rooms
- 80 8) Periodic health check-ups and health related lectures
- 81 9) Facility for first aid in emergency
- 82 10) Adequate number of toilets.

83 **STATISTICAL ANALYSIS**-Using SPSS version 19 applying chi square test

84 RESULTS

85 **Table no. 1 Distribution of schools in the study area (n=186).**

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Schools	Number	%
Private	37	19.8
Government	149	80.2
Total	186	100

Comment [DKA14]: This is a non-parametric test. None of your results reflect this, rather you used descriptive statistics all through.

Comment [DKA15]: These results are very difficult to understand for the following reasons:

1. It is very difficult to differentiate between the population and the sample.
2. The researcher made mention of participants in this study. Who are they – students, teachers, administrators? We do not know.
3. How did he (she or they) collect the data? Nobody knows, except him (her or them).
4. All the data in all the tables were reflecting number of schools and nothing more.

Honestly, the whole thing is confusing. In the methodology section, there is great need for the researcher to tell us his method of data collection in details.
Is the collection of data done on sightseeing and how?

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103 Table no. 2 Environmental facilities available in schools (n=186).

Environmental Facilities	<u>Availability</u>		<u>Non availability</u>	
	No.	%	No.	%
Locality (Easily approachable)	186	100.00	0	0.00
Water supply	100	53.76	86	46.24
Adequate space in class room	143	76.89	43	23.11
Periodic white wash	153	82.80	33	17.74
Lightening and ventilation	132	70.97	54	29.03
Toilet facility:				
a) Latrine	62	33.33	124	66.67
b) Urinal	73	39.25	113	60.75
Play ground	122	65.60	64	34.40
Kitchen	56	30.10	130	69.90
Transport	20	10.75	166	89.00

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111 **Table 3 Health appraisal services in the school (n=186).**

	Available		Non available	
	No.	%	No.	%
Medical examination	186	100.00	0	0.00
Immunization	186	100.00	0	0.00
First aid kit	124	66.70	62	33.33
Record maintenance	186	100.00	0	0.00
Health education	186	100.00	0	0.00

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Table no. 4 comparison of school health services in private and government schools

Criteria school health services	Private		Government		P value
	n=37		n=149		
	No.	%	No.	%	
1. No physical punishment	37	100.00	149	100.00	1.000
2. No excess baggage	14	37.80	38	25.57	0.135
3. Safe and proper transportation	16	43.20	4	2.70	0.001
4. Hygienic drinking water	26	70.30	98	65.80	0.603
5. Minimum 4 game periods	33	89.20	129	86.60	0.881
6. Properly ventilated and illuminated class rooms	35	94.60	97	65.00	0.001
7. Periodic health check ups	37	100.00	148	99.30	1.000
8. First aid kit	28	75.70	96	64.40	0.194
9. Toilets					
a) Urinal	15	40.80	58	38.90	0.85
b) Latrine	14	37.80	48	32.20	0.516
10. Availability of kitchen	2	5.40	54	36.20	0.001

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137 In the present study 37 schools were private schools and 149 schools were government schools (Table1).
138 When availability for environmental facilities was surveyed, all the schools were easily approachable to
139 the students. Majority of the schools that is 143 (76.89%) of schools had adequate space in class room,
140 153 (82.80%) of schools did periodic white wash and 132 (70.97%) of schools had adequate lighting and
141 ventilation for the class room. Of the total 100 (53.76%) schools had adequate water supply, 122
142 (65.60%) had playground, 73 (39.25%) had adequate urinals, 62 (33.33%) had adequate latrines, 53
143 (30.10%) had kitchen and only 20 (10.75%) of schools provided transport to children (Table 2).

144 With respect to provision of health appraisal services in the schools, all the 186 schools provided
145 medical examination, immunization services and health education to students in the school. Of the total
146 186 schools, only 124 (66.70%) had first aid kit facility in the school (Table3).

147 When 37 (19.80%) of private and 149 (80.20%) of government schools were compared for provision
148 of school health services based on criteria recommended by Indian Academy of Pediatrics. 16 (43.20%)
149 of private schools and 4 (2.70%) of government schools provided safe and proper transportation, 35
150 (94.60%) of private schools and 97 (65.00%) of government schools provided properly ventilated and
151 illuminated class rooms and 2 (5.40%) of private schools and 54 (36.20%) of government schools
152 provided kitchen in schools. This difference was statistically significant ($p < 0.001$).

153 Where as significant difference for the criteria such as physical punishment, excess baggage, provision of
154 hygienic drinking water, availability of minimum 4 game periods, periodic health check up, availability of
155 first aid kit in schools, availability of toilets (urinals/latrines) was not found between private and
156 government schools. (Table 4).

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158 DISCUSSION

159 This study gives an insight into the priority issues of school health services in private and government
160 schools in India. As the school is the most common means through which every society prepares its
161 young for the future, establishing efficient school health services is crucial for addressing several gaps in
162 child health and development. Children spend a significant proportion of their time in schools and its
163 environment facility definitely carries a bearing on their well being. Child friendly schools aim to develop a
164 learning environment in which children are motivated and able to learn.^[6]

165 Majority of the schools had adequate space in the class rooms, had periodic white wash and
166 provided adequate lighting and ventilation for the class rooms, whereas only 53.76% of schools had
167 adequate water supply, 65.60% had play ground and only 30% of schools had adequate urinals, latrines
168 and kitchen. Only 10% of schools provided transport to children. Where as according to Ministry of
169 Human Resource Development, Government of India, 45.9% schools in India are without toilets^[7].
170 Whereas a study done in Mysore and Mangalore showed that more than 50% of schools had adequate
171 water supply similar to our study^[8,9].

172 In our study, health appraisal services like medical examination, immunization, health record
173 maintenance, health education was available to all the school children. Whereas study conducted in
174 Udupi district showed only 60% private and 85% government schools had periodic health check ups and
175 health education. In our study first aid facility was available in 66.7 % of schools which is more than study
176 done in Udupi^[10].

177 When private and government schools were compared for provision of school health services
178 based on criteria recommended by Indian Academy of Pediatrics, private schools were better in providing
179 services like safe and proper transportation, properly ventilated and illuminated class rooms, where as
180 kitchen facility was available more in government schools($p < 0.001$). The availability of kitchen in
181 government schools could be due to availability of government sponsored mid day meal programme in
182 these schools. Where as significant difference for the criteria such as physical punishment, excess
183 baggage, provision of hygienic drinking water, availability of minimum 4 game period in a week, periodic
184 health check up, availability of first aid kit in schools, availability of toilets (urinals/latrines) was not found
185 between private and govt. schools ($p > 0.001$) . These differences in school health services in private and
186 government schools may be because of more government schools were chosen for the study.

187 In a study conducted in Madhya Pradesh showed that only 50% of private schools had safe drinking
188 water, 65% had adequate light and ventilation which was comparatively better than government

schools. School health committee in 1961 in India recommended that all the schools should be child friendly by providing all the aspects of school health services both in private and government schools.^[3,4]

CONCLUSION

We found that none of the schools met all the 10 commandments. Although 50% of them followed 4 to 5 criteria. Hence there is need for emphasis to make schools a friendly place to promote child's physical, mental and social development. So the present study can help the government to set standards to certify schools as child friendly.

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