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Chapter 5

Strategic findings and targeted recommendations for enhanced school health services and school health environment

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5.0 Introduction

This chapter presents the findings and discussions, based on the analysis of the data collected through observation checklist, open-ended and close-ended opionnaire for teachers, group discussions with students and six case studies.Based on the results of the study, some important suggestions and recommendations are offered for the consideration of policy-makers, curriculum planners and other important stakeholders. Further, practical and research implications are included in this chapter. The conclusion lends a finishing touch to this study.

5.1.0.Major findings and Discussion

5.1.1 School Health Environment in Government and Private Schools

The crucial aspect of location is not well-reflected in both government and private schools covered in the samples as only nearly one-sixth of the schools are found healthy on this account. The same is the case with even premises and the boundary wall. The remaining five-sixths are either partially healthy or unhealthy. From this, it is clear that the very building blocks of the SHE are sorely missing. This is accounted for by the virtual absence of awareness among the school education

authorities about the very concept of the SHE and its constituents.

It is observed that little less than one-fifth of government and private schools are showing healthy indices with regard to condition of school building and classrooms, and light cum-ventilation in the classrooms. It is found that only over one-tenth of government and private schools do keep healthy lunch places. Nearly half of the government and private schools are showing unhealthy indices with regards to the aforementioned indicators, including lunch place. What explains this sorry state of affairs is that there is a well-marked emphasis on infrastructure but it is invariably unaccompanied by an equal emphasis on maintenance and repairs. There is no clarity in the mindset of the management about the critical role of maintenance and repairs ensuring the overall safety and security of the school personnel and students.

The data indicates that only around one-sixth of government and private schools are noted to be healthy when it comes to school and classroom furniture. Around two-fifths of the sample is to be found to be unhealthy. The management has not done enough thinking about the direct impact of factors like ergonomic furniture, make and types of furniture and above all the quality of furniture on the convenience, comfort, and health of the students. Further, the aspect of blackboard and furniture depreciation is ignored, leading to non-replacement of damaged furniture. School garden or green areas are not available in three-fourths of the government and private primary schools. Nearly one –sixth schools are unhealthy in this aspect.

Most private schools see the green area as means to enhance ornamental feel and aesthetic appeal, but are vaguely aware about the multi-tiered invisible benefits of green areas or a well-maintained garden. They are also afraid that the tree roots may cause damage to the water or drainage pipelines as well as the building. In the case of government schools, lack of water and disinterest in upkeep are the primary reasons behind their unavailability.

Close to two-thirds of government and primary schools show either unhealthy playground or do not possess one. The schools show unhealthy playgrounds largely because of their use as short-cut, progressive expansion of built-up structures and accumulated scrap. Both government and private schools lack playground as some of them might be occupying rented buildings, especially residential premises. The cost of land is one of the prohibitory factors.

Water for other usage and drinking water are unhealthy in more than half of government and private primary schools. Nearly one-third schools use partially healthy water. In the ever burgeoning metropolitan city of Hyderabad, most of the water is used for commercial purposes. Even the water that is meant for domestic

purposes is distributed haphazardly. Primary schools are unable to purchase

Partially healthy electricity supply is observed in around one – third of the schools. Also, around one-third of government and private primary schools haveunhealthy electric supply. Many government schools have erratic electric supply with partially functional fans and tube lights. Most private schools look out for savings on their power-bills, especially in the context of commercial power-tariff in Hyderabad. The fact that primary children are hardly demanding apart from the school hours being short makes it all the more convenient for the school management not to attach any significance to electric facility.

The government and private primary schools with unhealthy toilets number around one- half. Also, around two-fifths of the samples have partially healthy toilets. The centrality of toilets in overall sanitation and hygiene is paid short-shrift. To compound the existing woes, poor and irregular monitoring of toilet use and cleanliness is one other factor. The school management does not know the availability of economical and effective disinfectants that can be used liberally and frequently.

Over a half of government and private primary schools keep unhealthy drainage system, while in nearly one- third of schools, it is partially healthy. Waste water is permitted to flow and stagnate, usually in the backyard, as a result of which teachers and staff tend to overlook. Poor technical knowledge of drainage system is evident among the school personnel. Garbage collection and disposal is unhealthy in nearly one-half of the schools, with government schools virtually doubling private schools in this aspect. Among all the schools, on the whole, nearly two-fifths have adopted partially healthy garbage collection and disposal practices. The playful primary school children usually generate more litter, especially torn papers and plastic covers all around the premises making it difficult for the available sweeper(s). Also, non-availability of a nearby municipal waste-bin or availability of adjacent vacant land restricts safe garbage disposal practices.

5.1.2 School Health Services (SHS) in Government and Private Schools

It appears that there has been no sincere endeavour to frame a micro school health policy by any one of the surveyed government and private schools. Whether it is central or state government, a macro school health policy has not been formulated. The National Comprehensive Education Policy, 1996 is the basic and most important policy document meant for all kinds of schools. Unfortunately, the concept of comprehensive school health has not merited attention even in such a significant document. It is little wonder then that there is not even a semblance of

a school health policy in any school. None of the schools under the study have formed a school health club. The school health club is non-existent as a concept itself. Even those progressive schools which have set up school clubs like debate club and fun club etc, have not heard about school health club anywhere. Analysts also see it as a pure western concept as they feel that this club is meant for extension activities. In the Indian scenario where even the basics of school health are either not comprehended or practiced, there is no scope for the higher realm of extension activities.

It is observed that over four-fifths of the government and private schools do not have a mandatory school health committee even on paper. The government schools do have a partially working school health committee, but only in nearly one- sixth schools. The government schools fare much better on this count as compared to the zero record shown by private schools. This is because the state government department of school education has set clear-cut guidelines and also made it mandatory to set up a school health committee at every government school. Though this committee is meant to be formed even in all private schools, the authorities in dept. of school education insist the same in government schools especially during inspections. Both records are conspicuous by their absence in all the surveyed schools. The maintenance and preservation of these records seem to be impractical as well as unviable simply because there is no distinct support system. It is seen as a burdensome, peripheral activity.

The school health action plan is missing in every government and private primary school covered under the study. The absence of a fund meant for school health or any of its components make it virtually impossible formulating a school health action plan and or its implementation. School health action plan is also not insisted upon by the concerned authorities. Health promotion for teachers, students and parents is unheard of in all the surveyed schools. Intersectoral coordination and convergence are essential to promote health for teachers, students and parents. Complete disregard shown by the concerned government authorities towards child health finds its manifestation in total absence of health promotion for primary schools. The poor presence of child welfare NGOs compounds the existing state of affairs.

As far as school health budget is concerned, it is not estimated in any of the government and primary schools. No private school covered in the study believes in the practice of overall annual budgeting. So a common school health budget is out of the question here. Whereas in government schools, the annual budgeting

exercise is itself counter productive due to highly delayed sanctions. There is no criterion of school health as a mandatory fixed percentage of an annual budget. Lack of such a criterion leaves the school in the lurch. Health education, through books or CDs is totally invisible in the entire sample. An apparent contributor to this scenario is the very fact that it is very difficult to grill primary school children on the basics of an esoteric subject like health education. The teacher does not find time or energy to explain the basics of health education from books and CDs to the students who are enabled to learn on their own.

IEC material is not available in close to two- thirds of the surveyed schools. Selection of relevant IEC material from the available wide-ranging clutter is a time consuming exercise, which prevent most of these schools from procuring and displaying the same. The unwillingness to spend on IEC material appears to be another constraint. It is further observed that health guidance and counselling is not offered to students in all the surveyed schools. It is presumed that primary school children need not undergo specialised health guidance and counselling. Even the school management does not wish to adopt any small initiative in this regard as the focus is on educational guidance and counselling.

Over four-fifths of government and private schools do not conduct or participate in health camps. Since routine medical checkups are anyway conducted for students once in a while in or out of the school, the need for health camps in the school is not perceived by the school management. Even parents do not expect the school to conduct the health camp. It is found that exactly four – fifths of all sample schools do not observe or celebrate health days. Observances or celebrations of health days or events require certain expenses which are not feasible in the absence of sufficient funds and also a school health action plan. Since such celebrations primarily involve event management, the school management prefers to keep itself away from conduct of the same.

As far as health exhibitions are concerned, it is observed that these are not held anywhere in the sample schools. Unlike high school students, the primary school students cannot contribute to the preparation and display of exhibits, thereby ruling out this very endeavour. Poor attendance of such exhibition by parents and community members also deters the schools.

Exactly four-fifths of the schools do not encourage discussion of child's health Due to the absence of health guidance and counselling, health camps and health days; there is hardly any scope for teachers to discuss about the students' health with respective parents. Teachers feel diffident about assessing health status and sharing the information about the same with parents. Over four - fifths of all

schools do not supervise their school health environment. The very lack of emphasis on school health environment on the part of the school management discourages them from supervising the same. The highly reactive mindset of school management diverts their inclination from supervision to receiving of feedback from other stakeholders.

Games / sports and exercise are not held or partially held in over four-fifths of all schools and Yoga is not offered in any of the sample schools. Games, exercises aretwo-thirds of all schools do not offer checkup of eye, ENT, diarrhoea, and nutritional disorders, but it is much worse in the case of dental checkups as over nine – tenths of schools do not offer such. No school or cluster of schools has a full- fledged medical team which renders the task of conducting regular health checkups unviable. Three- fifths of all schools do not offer first aid facilities. Availability of first aid in a nearby hospital in the city dissuades the school management from arranging first aid facilities. The lack of a trained para-medical person to apply first aid is another reason that creates inertia regarding facilitating the same.

Mid day meals is not offered at all in private schools while it is fully in place in all the government schools. Mid day meals is arranged in government schools due to commitment and political will. Mid day meals is not arranged in private schools as government does not arrange for the same.

Except nearly one-tenth of private schools, all other private schools and all government schools do not arrange for emergency services for fire/accidents. The school management lack technical awareness about planning and managing emergency services for fire/accidents. The school personnel are not equipped with capacity to deal with such crisis.

School health insurance It is zero in the complete sample.So far no government or private health insurance company has come forward to offer a satisfactory student health insurance package to schools in general. Also, any form of insurance, including health insurance, is perceived to be a waste of money by the average Indian including the school management representatives.

5.1.3 Opinions of teachers on School health environment, School health services and School health education

With regard to school health environment at least four-fifths of the surveyed teachers are of the following opinions:

- Students should not be permitted to purchase snacks and beverages from

hawkers outside the school premises.

- Green, clean, peaceful and centrally located surroundings do positively influence the school health environment.
- A separate lunch room is a major contributor to overall hygiene in the school.
- Poorly maintained toilets not only generate bad smell but also lead to unhealthy toilet habits among the student
- Physical activities or lack of it directly influence obesity or underweight or normal weight among the students.
- Every school should collect suggestions from parents/families/guardians/students for improvement of school health
- environment and school health services.
- The classroom condition affects the physical fitness and health of teachers and students.
- The infrastructure is not conducive to eyes and body comfort of students at times.
- The school health environment has a distinct influence on educational outcomes like absenteeism, drop-outs and school failures.
- Use of blackboards and white-chalks serves as a health risk to the teachers.

It is found that three-fifths to four-fifths of the respondents are not sure or did not know when questioned about the following aspects:

- Potability of drinking water as per municipal norms.
- Satisfaction of students with mid-day meals.
- Nutrition, taste and sumptuousness of the mid-day meals.

Administration of this research tool on opinions of school teachers about school health environment has revealed certain facts. One is that both government and private school teachers are not aware of the concept of school health environment but when asked about small aspects of the same are able to clearly express in the favour of those measures which promote school health environment.

They were not sure only about a few situational queries posed to them. One can surely infer that fragmented awareness of the school teachers about integral aspects of school health environment needs to be upgraded into organized knowledge. The school teachers are also not sensitive to the cumulative impact of healthy practices, conditions, and behaviour on the overall school health environment.

Lack of systematic training on school health environment has ensured that school

teachers do not have a bird's eye-view of the same .They know what's but not the why's and how's of school health environment .It appears that they are unable to fit together the pieces in the puzzle that school health environment is to them. They may be able to do so with necessary guidance and training.

With regard to school health services at least nine-tenths of school teachers keep the following opinions

- In general, parental feedback regarding health services is more negative than positive.
- School health services staff like school counsellor should be exclusively appointed to ensure consistent and robust school health services.
- Every school requires a separate budget for school health.
- Lack of monetary and infrastructural resources form a barrier to improve school health services.
- Lack of school district and administrative support is a greater barrier to improve school health services.
- There is a need to adopt a specific model for development and implementation of a comprehensive school health package.
- Meetings and in-service activities for school administrators and teachers need to be exclusively conducted to discuss and promote school health resources.
- Every school must formulate an action plan to create itself as a health promoting school.
- Routine immunisation services (TT and hepatitis B) must be offered to all the students in the school.
- Simple, preventive measures must be adopted regularly to prevent infections like dengue, malaria and parasites.
- Expenditure on healthy school environment and school health services is complimentary to the goal of universalisation of primary education.
- Lack of monetary and infrastructural resources form a barrier to improve school health services.
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Expenditure on healthy school environment and school health services is complimentary to the goal of universalisation of primary education.Regarding school health services, the school teachers know what needs to be provided to the students. But they expressed helplessness about arranging for the same as provision of school health services is largely in the hands of the school management.The school teachers also feel that though they have a fair idea of an ideal package of school health services, the limited resources of time, money, energy, manpower, know-how and commitment at the disposal of the management impede the translation of ideal scenario into reality. The teachers are also of the opinion that the management could take initiatives to identify school health priorities and implement essential school health services in accordance with the available resources, involving teachers as a part of this endeavour. With regard to school health education at least four-fifths of the primary school teachers entertain the following opinions:

- Health ducation is more important relative to other academic subjects.

- Student-centered instructional activities, such as group activities, role play and hands-on activities are required to be adopted by teachers to address a variety of health education content areas.

- Health education content areas should be designed to enhance students' knowledge, attitudes and skills in healthcare.

- Parents and local community members are offered few opportunities for involvement in primary health education.

- The role of physical education teachers needs to be enlarged to promote health education in the school.

- School teachers are obliged to impart informal, relevant health education to the students with minor disabilities.

- Students suffering from communicable diseases need to be kept out of school until they return to normal health.

- There is a need for dissemination of information to school educational administrators that underscores the importance of the school's role in promoting health for children.

In response to the question of whether health education needs to be introduced as a mainstream subject or integrated with mainstream subjects, more agreed in favour of the latter.

School teachers do believe that health education is a significant academic subject on its own but appear to be slightly confused about the manner of treatment of the subject in the classes. It is of particular interest to note that health education is seen as both an academic subject and an area of practical interventions by the school teachers. They are willing to adopt innovative and student friendly approach for the benefit of primary school children in order to incorporate basics their teaching. But they also expressed the need for training manuals to be prepared and distributed to them so that it becomes convenient for them to learn, assimilate and then disseminate the same to the students and support staff. What the school teachers are pleading in essence is comprehensive academic support to drive health education .

The open-ended opinionaire administered to the teachers reveal that the government school teachers and private school teachers seem to hold different views on school health environment. Many government school teachers are highly critical about pollution, drinking water, toilets and drainage. They are disappointed that though their respective government schools do set up fine infrastructure and facilities at the outset, these are not maintained well. Due to the presence of dust, dirt and debris on the playground or the open corridors, respiratory ailments are common in many government schools. A common lament of these teachers is that the department of school education takes arbitrary decisions which are not equitable and logical as well. As an example, a few mentioned that some government schools receive much better funding while some other government schools are deprived of funding. These teachers feel that well set criteria can be used for determination of responses to funding proposals received from different government primary schools.

What is of interest to note is that though playground is available in many government schools, the teachers are unhappy about it as it is not maintained well and is a major source of dust pollution? They are also not very forthcoming about suggestions for improvement of school health as they were sceptical about the

required procedures and permissions that need to be in place for the suggestions to be implemented. Some were critical of the mid-day meal as they opined that it lacks taste, quality and variety. Most government school teachers failed to articulate well about an ideal school health environment. They also expressed their unhappiness with the lack of any health education initiative from the state department of health, medical and family welfare as they felt that they cannot learn on their own without support from the aforementioned department.

The private school teachers were some what reluctant to disclose frankly their opinion. But there was unanimity among them about the need to convince the school management that it is in their best long-term interests to enhance the school health. It would also help a lot if they are put under consistent pressure by the parents to make improvement on the school health front. The teachers were of the opinion that the current thinking in most of the private school management was that the connection between school health and education was moderate at the best. Even if they are informed that the connection is deep and long term, they are not able to understand the "how" of it guaranteed if they are at home. Some students also disclosed that the school offers them a safe refuge as otherwise they will be forced to do painful household work or even risky jobs in small shops. These students felt good about sitting with so many others in the classroom and playing with them in the school premises. Some students informed that the only routine medical checkup they undergo in a year or two is at their school. A few students also informed that when they reported sickness at school, their school teachers asked them to show their student identity cards at a nearby hospital where they are treated and given medicines free of cost.

Coming to the students from lower middle class families and studying in government primary schools, they were of the overall opinion that there is really no difference between home and school with regards to school health. For instance, what they normally eat at home is what is offered to them in the school mid day meals. But what these students felt good about is the availability of space in the school premises, a missing aspect of their lives back at home.

Students belonging to middle class and the upper middle class families normally join the private primary schools. They complained about lack of space, be it sitting space or playing space or working space. Many complained about the toilet condition, saying that though toilets appear to be clean for some time in the morning, they are unable to visit the stinking, over used and badly used toilets as the day progresses. These students are also critical of the congested classrooms

where they are forced to stretch out their necks to read from the blackboard and also sit tightly with hardly any space for the elbows while writing.

On the whole, the students' opinions were shaped by their socio-economic background and relative conditions at home. They were not aware about concepts relating to school health environment and school health services but were particular about food, space and toilets which mattered a lot to their body comfort and feel.

5.1.5 Case studies- Summary of findings

It is observed in a comparative analysis that school health is not much superior in a role model government or private primary school vis-à-vis a medium government or private primary school. But in a deprived government or private primary school, the school health scenario was markedly much down if compared to a medium case.A typical deprived government or private primary school is lacking on almost all fronts in school health. Skeletal investments and horrendous negligence with regard to location, premises, school building, classroom condition, water facility, electric facility, toilets, and drainage system and garbage clearance mark out the deprived school from other schools. No thought is given to school health services while school health education is unheard of and considered irrelevant. Both the deprived government and private primary schools covered in the case studies badly need a shift to another campus as an urgent starting point to better school health due to the poor building condition.

Regarding the two medium cases, it was found that each such school has variations in school health environment, services and education features. But a striking feature observed in the medium government school is that it is short of funds and manpower but not on noble intentions. The concerned headmaster is keen about enhancing the school health, but is unable to secure adequate funds from the concerned authorities. As far as the medium private primary school is concerned, it is a clear-cut case of partial neglect as well as inadequate investments. The annual investments in school health are dependent on annual returns. School health is also low in the investment hierarchy.

The private school teachers opined that since most of the primary children were rushing to private schools, they were willing all the time to admit more and more children, regardless of the existing school infrastructure and facilities. This has lead to further deterioration of the existing school health environment.

Regarding school health services, the teachers are of the opinion that the school

management is interested to offer the core school health services if these could be incorporated in the annual fee package. Since private primary schools are engaged in a race to charge competitive fees, the teachers advocate a mainstream of school health services into the annual fee package. This can be done best by the school education department. The private school teachers are in favour of rigorous training on school health so that they can disseminate key health information to their students in the daily classes. Some lamented that they could not lay their hands on any health education reading resources.

The private school teachers opined that their respective schools do sustain at least one innovative practice in school health, be it arrangement of aerated drinking water or conduct of special classes on health themes or procurement of ergonomic chairs.

5.1.4 Perception of Students on School Health

The focus group discussions (FGDs) were held in order to obtain the opinions of both government and private primary school students. Students from class V were selected as the respondents. Some ideas that came from them were innocent but served as refreshing eye-openers.

The students were more inclined to do comparative analysis of health [facilities, environment and services] at school and home. The students hailing from lower classes and studying in government primary schools are reasonably satisfied with the school health services. They are glad that they are able to enjoy stomach – filling and tasty mid day meals. These students revealed that they are interested to study in the school mainly because of the availability of mid day meals which is not As far as the role model cases are concerned, these schools are not idealistic. The school health scenario is comparatively superior and no doubt a role model to the huge numbers of schools that lack even bare minimum school health facilities and services. Though a few aspects of school health are missing in the role model cases, any casual observer is struck by the basic neatness and cleanliness that characterize the open space, school building and classrooms. A few basic health services are also available. And a sincere attempt is made to impart key health messages.

In a nutshell, each case represents a different stage of evolution in school health. The hurdles are different for government and private schools on this path of progress with regard to school health. If it is bureaucratic delays, excessive paperwork and limited incremental funding that bog down the deprived, medium and role model government primary schools, it is a combination of profit obsession, space crunch and lack of will power that hamper the deprived, medium and role

model private primary schools.

5.1.6 Government Primary Schools Vs Private Primary Schools: School health Environment and School Health Services.

The F test is applied as a means of analysis of variance (ANOVA) to test the two null hypotheses. Two null hypotheses were tested. The first null hypothesis thatthere is no significant difference between government primary schools and private primary schools with regard to school health environment is accepted. Similarly the second null hypothesis that there is no significant difference between government primary schools and private primary schools with regard to school health services is accepted.

So it is clear that there is no significant difference between government primary schools and private primary schools with regard to school health environment as the latter are slightly better than the former in some of the dimensions. There is no significant difference between government primary schools and private primary schools with regard to school health services also. It is also observed that there are some differences between government primary schools and private primary schools in Hyderabad as reflected by the survey. A collection of comparative points is produced below:

Private schools are moderately better than the government schools with regard to location, premises, boundary wall, building and classroom condition, classroom light and ventilation, seating furniture for children, tables/chairs for teachers, blackboard, playground, drinking water and water for other usage in the realm of school health environment. Private schools are substantially better than the government schools with regard to lunch place, electric supply, fans and lights in classrooms, staffroom and HMs room, condition of toilets, drainage system and garbage disposal. No difference has been found between the government and private schools with regard to school health policy; school health club; student health profile; school health record; school health action plan; health promotion for students, teachers and parents; school health budget; health education- books, CDs, VCDs; health guidance and counselling; health exhibitions; curricular events - exercises and yoga; health checkups-eye and ENT; and student insurance coverage. All these aspects fall in the realm of school health services.

- Private schools are found to be moderately superior to government schools as far as IEC material, discussion of child's health, supervision of health environment, checkup– dental, worm infestations, diarrhoea, nutritional

deficiency and emergency services for fire/accidents. Private schools are substantially better than government schools with respect to games/sports and first aid facilities in the realm of school health services.

- Government schools are moderately better than private schools with regard to health camps, celebration of health days/events Government schools are substantially better than private schools when it comes to school health committee and mid-day meals as part of the school health services.

5.2.0 Suggestions and Recommendations:

1. A national and a state-level school health policy should be formulated by school health experts.

2. Basic guidelines meant for a micro-school health action plan should be incorporated in the macro school health policy.

3. Primary schools should be accorded recognition, based on criteria inclusive of school health parameters.

4. Every school must appoint a watchman, a gardener and more than one sweeper which will help ensure healthy school environment.

1. Private schools must limit the admission to 30-35 students per classroomfor healthful school environment.
2. A standardized school health record/student health profile formats shouldbe provided for each school apart from prescribing compulsory annual health checkups.
3. Every school should prepare and enforce an annual school health budget

4. A health counsellor must be engaged to provide detailed health guidanceand counselling for an average of 10 hrs/week.
5. A training program on disaster risk reduction can be held for all school personnel every year in order to equip them with skills to plan for and deal with emergencies.
6. A customised, affordable school-specific health insurance package mustbe offered by a public insurance company.
7. Every school can ensure that it's surrounding and premises are kept neatand clean.
8. Tall, well-built boundary wall enclosing an entrance gate can be constructed

on all the four flanks.

9. White washing of the entire building can be done every three years.

10. Repairs and renovation may be taken up promptly to avoid furtherdamage.
11. Ergonomic desks and benches or tables / chairs can be procured.
12. Interior classrooms lacking natural light and ventilation can be done away with and instead further floors can be constructed with classrooms enjoying natural light and ventilation.

13. A blackboard with appropriate length and breadth can be set up to facilitate strain – free viewing for all students.
14. A wall-cupboard can be provided in every classroom.

15. Where ever space is available, a small garden can be developed, and in small premises, flower or hanging plants can be placed.
16. A playground can be maintained free of dust, dirt and debris in schools where it is available.
17. Drinking water can be tested once every month at a water testing lab to ensure that it is free of contamination, regardless of the source.
18. Drinking water containers with a tap or a ladle should be placed at two-foot height to prevent it from contamination.
19. Storage facility in sumps or tanks can be made to have sufficient water for other usages.
20. Safe wiring system can be installed throughout the building to prevent short circuits.
21. Cleaning of premises, classrooms and fans can be cleaned frequently to maintain indoor air quality.
22. Every toilet can be cleaned with sufficient water and effective disinfectants on hourly basis during the school hours.
23. Both a closed sewerage pipeline and a storm water hole can be developedfor a healthy environment.
24. The school can establish an arrangement with the GHMC to ensure daily disposal of garbage.

25. Private schools must limit the admission to 30-35 students per classroomfor healthful school environment.
26. A standardized school health record/student health profile formats shouldbe provided for each school apart from prescribing compulsory annual health checkups.

27. Every school should prepare and enforce an annual school health budget

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32. Tall, well-built boundary wall enclosing an entrance gate can be constructed on all the four flanks.
33. White washing of the entire building can be done every three years.

34. Repairs and renovation may be taken up promptly to avoid furtherdamage.
35. Ergonomic desks and benches or tables / chairs can be procured.

36. Interior classrooms lacking natural light and ventilation can be done away with and instead further floors can be constructed with classrooms enjoying natural light and ventilation.
37. IEC material available freely can be procured from government departments and healthcare NGOs and displayed at vantage points in the premises.
38. In the parent-teacher association meet, every available parent can be individually sought to discuss about health complications shown by vulnerable children.
39. The headmaster/headmistress can make it a point to make a personal, thorough check of all nooks and corners in the entire premises to adopt at least small, corrective steps wherever necessary.
40. One games/sports period can be kept for every class as part of the daily class schedule.
41. One hour of simple physical exercises and yoga can be kept mandatory for every class every week.
42. Whenever health complications are shown by students during the health check-up, referrals can be done with appropriate doctors/clinics/hospitals.
43. One support staff member can be trained to handle first aid for all cases in the school.
44. Mid day meals can be provided as part of the fee package in every private school to provide balanced, nutritious food to all the students and also

prevent the daily hassles associated with arrangement of a lunch box.

45. One all-inclusive health camp can be arranged with the aid of a sponsor once every year in the school.
46. Whenever seasonal infections occur, parents of children suffering from infections can be promptly requested not to send their children to school
47. until normalcy is restored.
48. A blackboard with appropriate length and breadth can be set up to facilitate strain – free viewing for all students.
49. A wall-cupboard can be provided in every classroom.
50. Where ever space is available, a small garden can be developed, and in small premises, flower or hanging plants can be placed.
51. A playground can be maintained free of dust, dirt and debris in schools where it is available.
52. Drinking water can be tested once every month at a water testing lab to ensure that it is free of contamination, regardless of the source.
53. Drinking water containers with a tap or a ladle should be placed at two-foot height to prevent it from contamination.
54. Storage facility in sumps or tanks can be made to have sufficient water for other usages.
55. Safe wiring system can be installed throughout the building to prevent short circuits.
56. Cleaning of premises, classrooms and fans can be cleaned frequently to maintain indoor air quality.
57. Every toilet can be cleaned with sufficient water and effective disinfectants on hourly basis during the school hours.
58. Both a closed sewerage pipeline and a storm water hole can be developedfor a healthy environment.
59. The school can establish an arrangement with the GHMC to ensure daily disposal of garbage.
60. One thematic health education exhibition/fair can be organized by the school with active involvement of the students once every year.
61. Every school may request for free copies of Telugu and Urdu health education manuals and booklets from the state department of health.

5.3.0 Reflections and Implications

This researcher has learnt the essentials of school health components, parameters involved in measurement of school health environment and research tool scale preparation. The researcher has also learnt through trial and error, the techniques

to elicit articulated responses from teachers as well as from students, by open-ended data collection. It was an eye-opener to note that a combination of willingness and optimal utilization of available resources are enough on the part of the school to radically upgrade its health environment.

This study throws open huge practical implications for the major stakeholders related to school health. It is very clear from the findings that whether it is school management or teachers or students or parents or school education authorities, everyone is vaguely or moderately or substantially aware about school health environment and school health services, but absolutely lack organized knowledge. This means that some major or minor stakeholder has to take up the cause of school health in a big way by popularizing, internalizing, customizing and disseminating key school health aspects meant for the benefit of one and all. The significant areas of intervention in school health could be training, courseware preparation, debates, advocacy, school health policy making, fieldwork extension, outreach and health counselling. The school education authorities firstly need to incorporate health into their macro planning exercise. They must also insist on the same while dealing with the private school management. They also need to know the deep, intimate relationship between school and health. They are required to comprehend the criticality of sound, comprehensive investments on child development, primarily inclusive of holistic health. The currently worrisome scenario calls for intense intersectoral convergence in school education between different setups, particularly child development and health department. The most important practical implication concerning school management is that it needs to integrate health into their annual expenditure exercise. They need to develop cost-effective measures in such a manner that health is seamlessly interwoven with education. The teachers are required to act as students' champions and school health catalysts in the true sense of the term. They should be able to balance between management concerns, student needs and parental expectations. One important role that the teachers can assume without support from other quarters is to themselves impart basic information on healthcare to their students as a small part of their daily teaching.

The teachers do play a critical role in inculcation of healthy habits and behaviour through individual monitoring, simple instructions and relevant examples.

Since the primary school-aged are in their formative years, positive health behaviour and practices can be instilled by provision of facilities and guidance from teachers as well as parents.

Often the parents of school children are obsessed with the cause of education. But it becomes imperative for them to understand that health is a core determinant of educational standards. They should also see the school as a major source of influence on the child's day-to-day health.

The parents can also take the initiative of applying friendly pressure on the management and teachers through the forum of PTA, wherein they can demand essential facilities, services and interventions in order to ensure and promote child health. Matters can be taken up by the local neighbourhood including leaders. The available doctors and paramedical personnel from the neighbourhood can assume a lead role by delivering health services.

The major health days and events can be celebrated by the neighbourhood as a part of which the local schools can together be involved. The resident welfare associations can arrange for daily systematic garbage collection and disposal on behalf of the local schools, limiting the role of the schools to just keeping garbage in waste bins.

The study points to different implications for school health researchers. Firstly, the same study can be replicated easily in secondary and higher secondary schools at Hyderabad and even in primary schools based in other cities anywhere in India as it is essentially a situational analysis. Researchers can also carry on from this study by undertaking a thorough comparative analysis of government and private primary schools in Hyderabad.

Based on this study, researchers can explore the role of school health environment as a driver or shaper of school health services and school health education, especially the links between variables of school health environment and school health education. Researchers can also look deeper into the corresponding influence of school health environment, school health services and school health education on education.

Researchers can obtain insights from this study regarding perceptions of school teachers and students about school health and probe further the unique motivators and needs that account for differences in perceptions between school teachers and students. As an extension to this study, researchers can develop standardized indicators and sub indicators pertaining to school health environment, school health services and school health education so as to make these applicable to all urban, semi-urban and rural schools and then adopt a grading exercise to assess the school health status of every school in the state or nation. Such a uniform

assessment and accreditation system, exclusively dealing with school health, can be utilized to enhance state funds as well as local bodies' resources for those schools showing progress or potential.

5.4.0 Limitations of the study

This study has chosen to leave out the high schools in order to retain focus on primary schools. This study has not dealt comprehensively with the intricate web of relationships between health and education as it has clearly limited its interests to school health environment, school health services and school health education for thesake of a thorough investigation. Another major limitation of this study is that it has not kept parents of primary school children as its respondents since it was felt by theresearcher that most parents of primary school children, especially the government owned ones, are not aware enough about school health aspects to be able to contributemeaningfully to the survey and focus group discussion exercises.

1. This study is limited exclusively to the primary schools and does not extend to high schools.
2. This study could not take up measurement of health status of the students.
3. In-depth research was not done on the health education component though it has a distinct status in the school health triumvirate.
4. Though the school education and health authorities are also major stakeholders in the domain of school health, these have not been covered as respondents in the study.
5. This study has not dealt comprehensively with the intricate web of relationships between health and education as it has clearly limited itsinterests to school health environment, school health services and school health education for the sake of a thorough investigation.
6. This study has not kept parents of primary school children as its respondents since it was felt by the researcher that most parents of primary school children, especially the government-owned ones, are not aware enough about school health aspects to be able to contributemeaningfully to the survey and focus group discussion exercises.

5.5.0 Conclusion

There are more number of children in schools than ever before .Hyderabad has 18

lakh primary school children (The Hindu, July 2009); close to two-thirds of them are studying in private primary schools. It becomes a paramount responsibility on the part of the primary schools, especially the private ones to focus on school health environment and school health services and to invest well on these bearers of the future, keeping in view the role of child development in the overall development of the nation. The Sarva Siksha Abhiyaan (Rajiv Vidya Mission) cannot attain its goal of universalisation of primary education, if sufficient attention is not paid to the inextricable and invisible links between school health and education; in the absence of which the huge investments on primary education will be rendered futile. So, efforts from all quarters must be made to ensure that school health occupies a centre-stage in the hierarchy of school education system.

Three recent developments are of interest. The Union Ministry of Human Resources Development has decided to set up 2,500 new model higher secondary schools, including primary section, as public private partnership schools in 2009-2010 as part of the central 11th five-year plan to establish 6000 new model higher secondary schools affiliated to Central Board of Secondary Education (CBSE). The other major decision is taken by the AP Government, a rather controversial one, as 2,500 existing state government schools, mostly primary schools and upper primary schools, shall be soon closed down and clubbed with nearby better-endowed schools in order to focus on up-gradation of infrastructure and learning resources in multi-school campuses as a means to optimise limited funds available for primary education and secondary education in view of the fact affirmed by MV Foundation (an NGO), a respected child welfare NGO, that over 21,000 state government schools do not have even pucca classrooms. The third development, a heartening one at that, is that the AP Chief Minister has decided to circulate brochures on swine flu in all the primary schools and high schools at Hyderabad as a major preventive measure in order to arrest the latest spread of swine flu or H1N1 influenza virus in the city. These three developments indicate that in the coming year's school health will gain enhanced attention, thereby motivating all the major stakeholders to contribute their mite to school health environment, school health services and school health education. Better days are indeed coming for the crucial cause of school health in Hyderabad, Andhra Pradesh and India on the whole.

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http://portal.unesco.org/education/en/ev.php- United Nations Educational, Scientific and Cultural Organization (UNESCO)

http://www.acdi-cida.gc.ca/index.htm Canadian International Development Agency(CIDA)

http://www.ashaweb.org/ Australian Health Promoting Schools Association

http://www.bog-standard.org

http://www.care.org/ CARE

http://www.cdc.gov/nccdphp/dash/index.htm United States Centers for Disease Control and Prevention, Division of Adolescent and School Health.

http://www.ceid.ox.ac.uk/child/ Partnership for Child Development (PCD)

http://www.childinfo.org/index2.htm UNICEF.

http://www.child-to-child.orgChild-to-Child Trust Education Development Center,

http://www.edc.org/HHD/Health and Human Development Programs

http://www.ei-ie.org/Education International

http://www.fao.org Food and Agriculture Organization of the U.N.

http://www.hlth.qut.edu.au/ph/ahpsa/Australian Health Promoting Schools Association

http://www.icrc.org International Committee of the Red Cross

http://www.indiana.edu/~aphs/hlthk-12.html#school Resources for School Health Educators

http://www.info.usaid.gov/

http://www.irc.nl/IRC: International Water and Sanitation Centre

http://www.lboro.ac.uk Loughborough University, U.K.

http://www.oneworld.org/scf Save the Children, UK

http://www.paho.org/english/hpp/hs_home.htm

http://www.safehealthyschools.org

http://www.sagepublicatons.com

http://www.savethechildren.org Save the Children, USA

http://www.schoolsandhealth.org.

http://www.unaids.org United Nations Joined Program on HIV/AIDS,(UNAIDS)

http://www.undp.org United Nations Development Program (UNDP)

http://www.unesco.org/education/fresh

http://www.unesco.orgUnited Nations Educational, Scientific and Cultural Organization (UNESCO)

http://www.unfpa.org United Nations Population Fund (UNFPA)
http://www.unicef.org United Nations Children's Fund (UNICEF)
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