

Assessment of Health Conditions in Schools: An Exploratory Study

Dr. Takashi Mori^{1*}, Dr. Yui Nakajima¹, Dr. Kenta Saito², Dr. Aika Yamashita², Dr. Hiroshi Fujii³, Dr. Nao Kobayashi³

¹Tokyo Medical University Hospital, Tokyo, Japan

²Nagoya University Hospital, Nagoya, Japan

³Tohoku University Hospital, Sendai, Japan

Abstract

Background: Schools are one of the best settings-based approach to promote health. Schools remain for many years been recognized as an important settings for health promotion for the community. The study provides description of schools health status in the city, concerning the activities and services components of school health and the deficiencies, accordingly the requested procedures and processes to improve that health situation, assuming that improvement of schools health status will lead the improvement of health status of the overall community. **Objectives:** The study aims to assess schools health status in Makkah city. **Introduction:** The study conducted to evaluate schools health status and services provided in Makkah city, 20 schools selected randomly for this purpose. **Methodology:** Descriptive study had been implemented, simple random sampling used, (20) schools selected for the evaluation of the six components of school health services and activities, data collected through checklist and interviews. **Results:** The study clarified that most schools in Makkah have a health supervisor, health supervision plan and a committee, but only 32% of schools have healthy foods provided. **Conclusion:** The study concluded that, health supervision was active, but there were weaknesses in the food services, unhealthy foods and drinks were available in schools. **Recommendations:** The study recommends for motivating schools health supervisors for the extra efforts they are providing beside their teaching responsibilities, in addition to that, periodic health education sessions for students is requested to raise their awareness on different health risks especially in school environment.

Keywords: School Health, Evaluation

Introduction

School Health is all the strategies, activities, and services offered by, in, or in association with schools that are designed to promote students' physical, emotional, and social development make up a school's health program.

When a school works with students, their families, and their community to provide these strategies, activities, and services in a coordinated, planned way, then the term coordinated school health program applies (School health IBC, 2009)

School health services: staff can help all students with preventive care such as flu shots and vision and hearing screening, as well as acute and emergency care. Qualified professionals such as school nurses, nurse practitioners, dentists, health educators, physicians, physician assistants and allied health personnel provide these services.

For students with chronic health conditions, school nurses and other health care providers play a large role in the daily management of their conditions. School health services staff also are responsible for coordinating care by communicating with the student's family and health care providers so that they can stay healthy and ready to learn. School health services is part of the Whole School, Whole Community, Whole Child model (WSCC) which promotes a collaborative approach designed to improve learning and health in schools. Another component of the WSCC model, Counseling, Psychological and Social Services, is often an area that overlaps with school health services, because a school nurse or school-based health center for additional care to address these needs may refer students (CDC, 2018).

Objectives

General objective: The assessment of school health status in Makkah.

Specific objective:

- 1) To explore effectiveness of health supervision at schools.
- 2) Assessment of schools physical environment.
- 3) To evaluate quality of schools food services.
- 4) To monitor classrooms health specifications and environment.
- 5) To explore physical activities at schools.

Material and methods

Study area

This study implemented in selected schools located in Makkah city, the total area of Makkah is over 1,200 km², and the total number of schools for boys are (594).

Study population

The total number of schools have been selected for this study were (20) schools.

Study design

Descriptive study design used to evaluate school health status in Makkah through questioners and interviews.

Sample size

Sample size determined by selecting randomly (20) schools for boys in Makkah city.

Inclusion criteria

All schools for boys in Makkah city.

Exclusion criteria

All schools for girls in Makkah city.

Data collection, interpretation

Data has been collected through questionnaires and interviews and interpreted using Excel program.

Ethical issues

No ethical clearance was required.

RESULTS

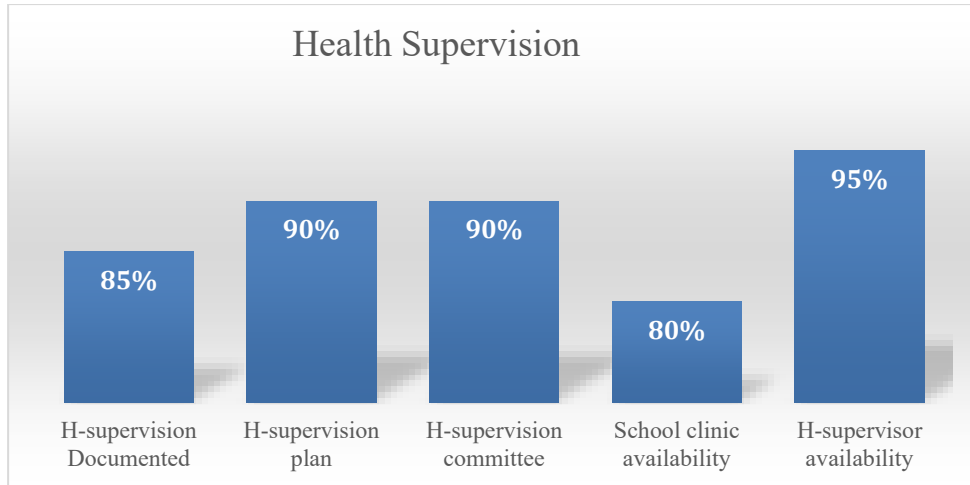


Figure1: Availability of health supervision in schools.

This figure showing that most schools in Makkah have a health supervisor, health supervision plan and committee.

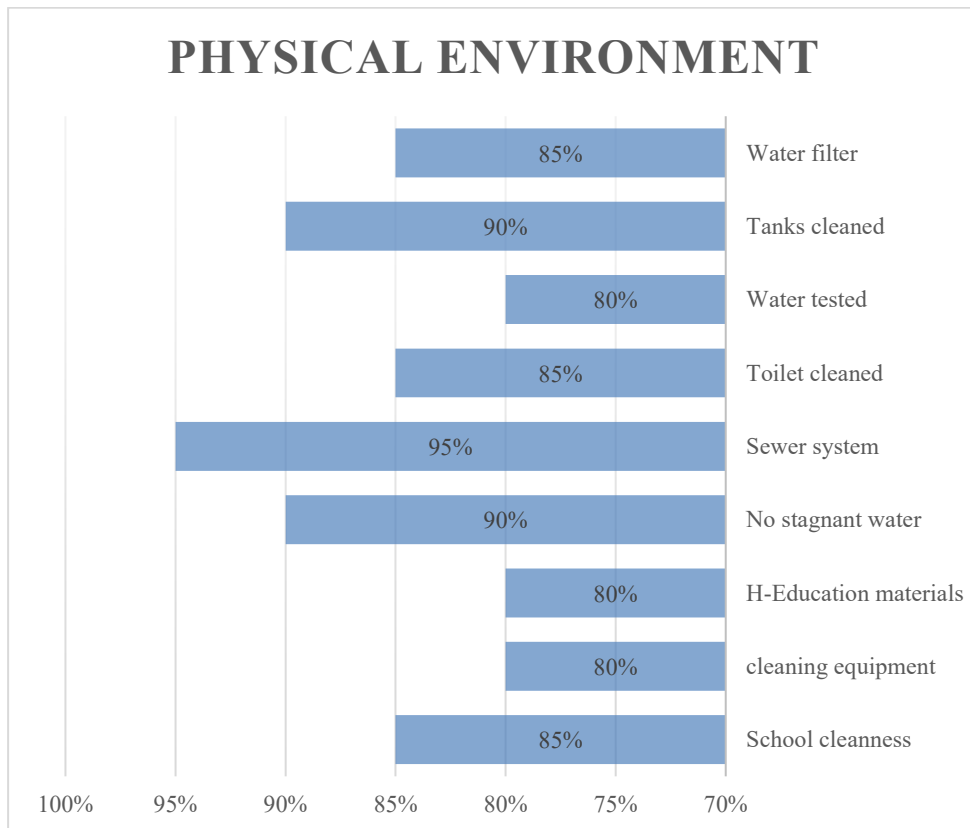


Figure 2: Indicator of physical environment at schools.

The figure showing that 20% of schools water are not tested, tanks periodic cleaning, proper sewer system achieved the best results

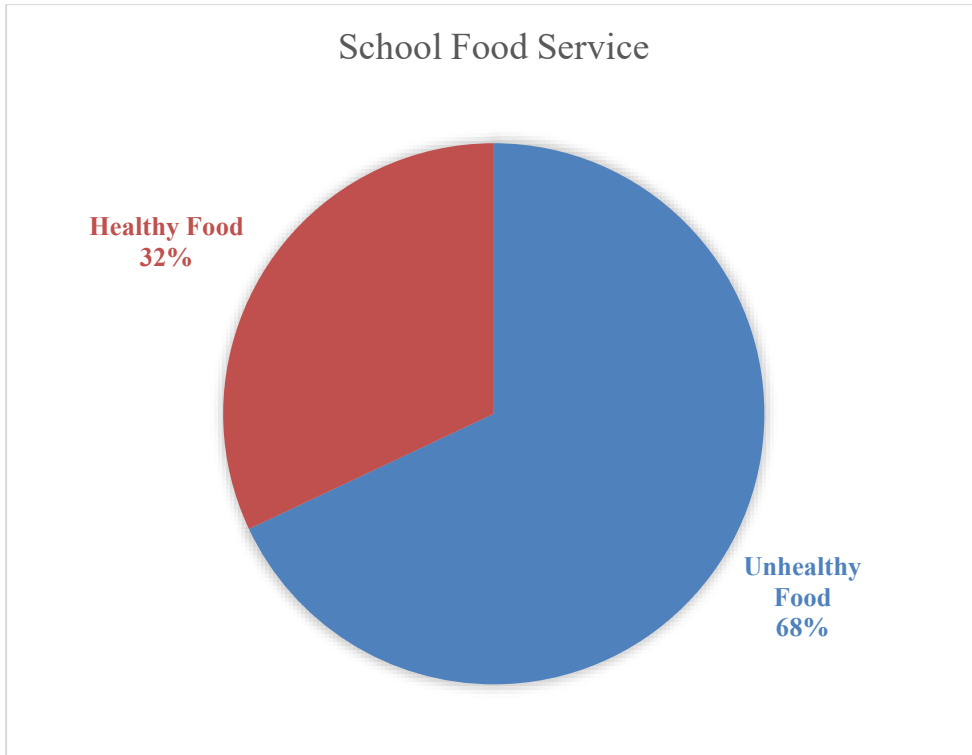


Figure 3: School food services in Makkah.

This figure showing that 68% of Makkah schools with unhealthy foods.

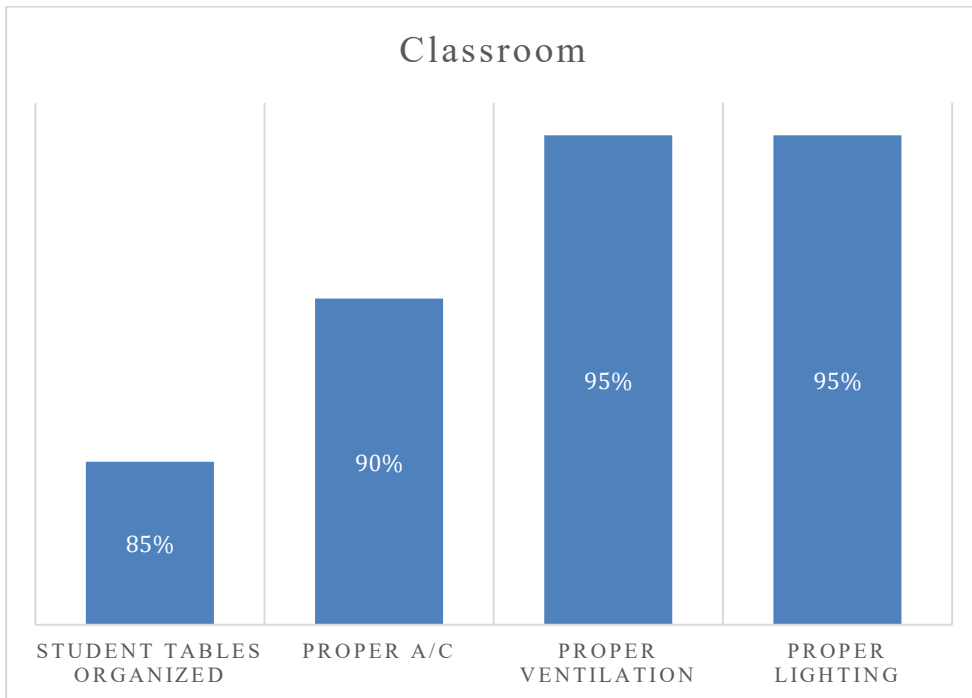


Figure 4: Classroom specifications

The figure shows that specifications and services of the classrooms were generally in good conditions.

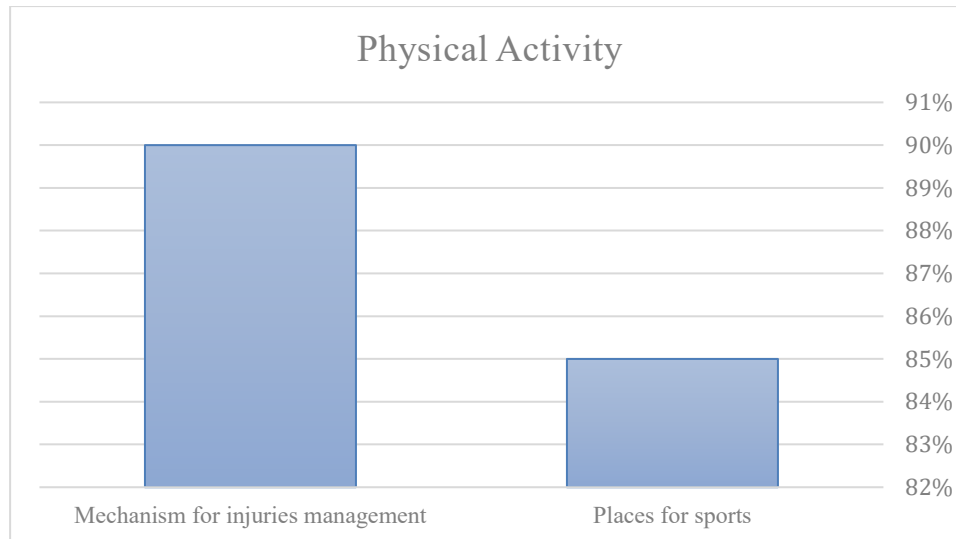


Figure 5: Availability of physical activity in school Health.

The figure showing that most schools have a mechanism for injuries management.

Discussion

The descriptive study designed to evaluate the health services and health status in schools of Makkah city, the evaluation based on the six components of school health services and activities.

Health supervision activities plays an important role in developing school health, its average was 88%. Most schools in Makkah have a health supervisor. Health supervision plans, eventually this leads to improvement in students health.

These findings agreed with the study of Zaine C. Leroy et al, which concluded that supervised school health services play an important role in the promotion of student's health (Leroy, et al., 2017).

Referring to school physical environment component, the study showed that most of the healthy environment activities were being well implemented, results showed that water tanks periodic cleaning and availability of proper sewer system achieved the best results, excluding water inspection in which 20% of schools participated in the study reported that water was not tested.

The study showed that food services in school was generally unhealthy, the percentage of healthy food was 32%, which can affect the health of students, schools are requested for more efforts in order to improve this component, This finding agrees with the study of Bushara MOE, Elqarni MGM, AlHassani ATRLB, Almuterfi H, the study concludes that , extensive efforts are needed from schools to supply healthy food items for students so that the component of food safety and nutrition service within schools will be improved (Bushara, et. al., 2017).

According to classrooms, health specifications and services was generally in good condition 90%, containing ventilation, lightning and proper air conditioning, etc.

The study clarified that most of schools had a mechanism for injuries management when necessary, which is considered as an important component of school health services as well as availability of sufficient places for students physical and sports activities.

Conclusion

The study concluded that there was a weakness in the food services, unhealthy foods and drinks were available in schools, study recommended for more efforts to improve food services.

In the study found that there was a good performance relating health supervision availability and services that contribute positively in the other components of school health services.

According to the study, there was a shortage of periodic check for school water tanks; study recommended for additional efforts on some services mainly water tanks periodic checks. Further, study concluded that school health services in targeted schools were generally good, but there were need for more efforts to develop and improve these services.

Recommendations:

1. Extensive efforts from school health and schools administrations to provide healthy foods.
2. Periodic training refreshment for schools health supervisors.
3. Periodic health education sessions for students to raise their awareness on different health risks.
4. Comprehensive health services directed to school staff organized by health supervisors at schools.
5. Motivating schools health supervisors for the extra efforts they are providing in addition to their teaching responsibilities.
6. Additional efforts on some services mainly water tanks periodic check.
7. More researches requested for the discovering and assessment of school health services and problems.

References

- School health1BC 2009. Definition of School health. Accessed Nov 14, 2018 Available on line at <http://sh1b.blogspot.com/2009/02/definition-of-school-health.html>
- Centers for diseases control and prevention (CDC) 2018. School health services. Accessed Dec 22, 2018, Available on line at <https://www.cdc.gov/healthyschools/schoolhealthservices.htm>
- Government of Western Australia, department of health. Accessed Feb 11, 2019, Available on line at <https://ww2.health.wa.gov.au/About-us/Child-and-Adolescent-Health-Service/Child-and-Adolescent-Community-Health/Community-health-nursing/School-health>
- Anderson, C. L. School Health Practice. Seventh ed. St. Louis: the C. V. Mosby Company; 1972:127-133.
- Department of Health 2018. Accessed Dec 28, 2018, Available on line at https://healthywa.wa.gov.au/Articles/S_T/School-health-services
- NCBI 1997. Accessed Feb 10, 2019 Available on line at <https://www.ncbi.nlm.nih.gov/books/NBK232689/>
- Delaware Department of education 2018. Accessed Dec 16, 2018, Available on line at <https://www.doe.k12.de.us/Domain/150>
- Jessie Haag. School Health Program. 4th ed. United states of America; 1972:1-7
- Jessie Helen Haag. school health program. Revised ed. Oxford. IBH Company: New York;1968:38-45
- Turner Sellery Smith. School health and health education. 4th ed. C V Mosby Company: United states; 1961:42-48
- Zaine C.Leroy.et al. The role of school health services in addressing the needs of students with chronic health conditions. The Journal of school nursing.2017;33:64-72.
- Bushara MOE, Elqarni MGM, AlHassani ATRLB, Almuterfi H. Evaluation of health promoting schools in Makkah city, Saudi Arabia. Int J community Med Public Health 2017;4:2234-9.