

**YANGON UNIVERSITY OF ECONOMICS  
MASTER OF PUBLIC ADMINISTRATION PROGRAMME**

**A STUDY ON KNOWLEDGE, ATTITUDE AND PRACTICES  
OF PRIMARY SCHOOL TEACHERS TOWARDS  
HEALTH PROMOTING SCHOOL ACTIVITIES  
(CASE STUDY: HMAWBI TOWNSHIP)**

**KHIN THANDA HLAING  
EMPA – 20 (16<sup>th</sup> BATCH)**

**AUGUST, 2019**

## **ABSTRACT**

Health is one of the important parts of development of a country. Promoting of health through school setting is the most cost-effective activity that produces viable outcomes. The study aimed to find the current level of health knowledge, attitude towards health promoting school (HPS) programme and practices on school health activities by the respondents. It consists of two main objectives, to identify the knowledge, attitude and existing practice of school teacher regarding on health promoting school activities and to assess the relation of characteristics of school teachers and their knowledge, attitude and practice level towards health promoting school programme. Cross sectional descriptive study design was used and 193 primary school teachers in Hmawbi township were conducted in this study. There were 47.2% of respondents had high knowledge level, 52.3% had positive attitude towards HPS activities and 59.1% had good in practicing HPS activities. It was found that teachers who have higher education and longer duration of services were more knowledge. In the attitude assessment, primary school teachers who have service less than 10 years and had better positive attitude than others but less practices in performing HPS activities. However graduated teachers had higher knowledge level, fair attitude and good practices was found in this study. Knowledge, attitude and practices had no correlation with each other.

## ACKNOWLEDGEMENTS

First and foremost, I would like to express my thanks and deep appreciation to Yangon University of Economics and Master of Public Administration Programme Committee for providing me this opportunity to undertake this postgraduate course.

I also would like to acknowledge Dr. Tin Win, Rector, Yangon University of Economics and Professor Dr. Ni Lar Myint Htoo, Pro-Rector, Yangon University of Economics.

I would like to express my gratitude to Professor Dr. Kyaw Min Htun, Pro-Rector (Retd.), Yangon University of Economics, Professor Dr. Phyu Phyu Ei, Programme Director of Master of Public Administration Programme and Professor and Head of Department of Applied Economics and Associate Professor (Retd.) Daw Khin Chaw Myint to have entrusted me with the task of writing this thesis.

My special thanks go to my deepest gratitude to my supervisor, Daw Theint Kay Thwe, Lecturer of Department of Applied Economics for her excellent guidance, caring, patience and providing me with an excellent atmosphere for doing research and completion of this study. And then, I am also grateful to all of teachers, EMPA Programme for their perspicacious guidance and sharing knowledge and experiences during my study.

Moreover, I would like to express Deputy Township Education Officer U Kyaw Shwe and Assistant Township Education Officer Daw Khin Aye Thant and primary school teachers from Hmawbi Township, for their help and support for data collecting processes required for this study.

Lastly, I would like to express my full appreciation and thanks to my EMPA colleagues and my family for their support and encouragement throughout this two year period. Their helpful comments and encouragement greatly assisted me to complete my thesis.

# TABLE OF CONTENTS

	<b>Page</b>
<b>ABSTRACT</b>	<b>i</b>
<b>ACKNOWLEDGEMENTS</b>	<b>ii</b>
<b>TABLE OF CONTENTS</b>	<b>iii</b>
<b>LIST OF TABLES</b>	<b>v</b>
<b>LIST OF ABBREVIATIONS</b>	<b>vii</b>
<b>CHAPTER I INTRODUCTION</b>	
1.1 Rationale of the Study	1
1.2 Objectives of the Study	4
1.3 Method of Study	4
1.4 Scope and Limitations of the Study	4
1.5 Organization of the Study	4
<b>CHAPTER II LITERATURE REVIEW</b>	
2.1 Basic Concept of Health Promoting School	6
2.2 Health Promoting School Programme	8
2.3 Essential Elements of Promoting Health in School	10
2.4 Benefits and Barriers to Implementing Health Promoting School Programme	11
2.5 School Health Promoting Activities in South East Asia	14
2.6 Review on Previous Studies	15
<b>CHAPTER III CURRENT HEALTH PROMOTING SCHOOL PROGRAMME IN MYANMAR</b>	
3.1 School Health in Myanmar	19
3.2 Comprehensive School Health Strategic Framework (2017-2022)	20
3.3 Health Promoting School Initiative	21
3.4 Current Health Status of School Children in Myanmar	24
3.5 Current Activities in Health Promoting School	25

<b>CHAPTER IV</b>	<b>SURVEY ANALYSIS</b>	
4.1	Survey Profile	29
4.2	Survey Design	30
4.3	Survey Findings	32
<b>CHAPTER V</b>	<b>CONCLUSION</b>	
5.1	Findings	57
5.2	Recommendations	59
<b>REFERENCES</b>		
<b>APPENDIX</b>		

## LIST OF TABLES

<b>Table No.</b>	<b>Title</b>	<b>Page</b>
3.1	Number of Schools, Teachers and Students in Basic Education Level (2015-2016)	23
3.2	Implementation of the Contents of Health Promoting School	28
4.1	Number of Schools, Teachers and Students in Hmawbi Township	30
4.2	Socio-Economic Characteristics of the Respondents	33
4.3	Attended School Health Related Training Course	34
4.4	Knowledge on the Components of HPS Programme	35
4.5	Knowledge on Main Health Education Topics for Primary Level	36
4.6	Knowledge on Aims of School Environmental Sanitation	37
4.7	Communicable Diseases that Transmit among Students	38
4.8	Basic Health Assessment and Examination Point of Personal Hygiene	38
4.9	Disease Prevented by Hand Washing Practice	39
4.10	Disease transmitted by Mosquitoes Bite and Vector Born Control	40
4.11	Nutrition and Food Safety Programme and Check Points of School Canteen	41
4.12	Knowledge on Sanitary Disposed Methods	42
4.13	Knowledge on Check Points of School Latrine	43
4.14	Positive Statements Regarding Health Promoting School Activities	44
4.15	Negative Statements Regarding Health Promoting School Activities	45
4.16	Practices of Teachers on Health Educating Activities	46
4.17	Practices on Checking Health Practices of Students	47
4.18	Practices of Monitoring Height and Weight of Students	47
4.19	Practices of Primary School Teachers on Nutrition Programme	48
4.20	Practices of Leading Students to Collect Garbage Disposal	49
4.21	Level of Knowledge towards Health Promoting School Activities	49
4.22	Relationship between Characteristics and Knowledge	50
4.23	Level of Attitude towards Health Promoting School Activities	51
4.24	Relationship between Characteristics and Attitude	52

4.25	Level of Practices towards Health Promoting School Activities	53
4.26	Relationship of between Characteristics and Practices	54
4.27	Correlation between Knowledge and Attitude	55
4.28	Correlation between Knowledge and Practices	55
4.29	Correlation between Attitude and Practices	56

## LIST OF ABBREVIATIONS

ASEAN	Association of Southeast Asian Nations
BEHS	Basic Education High School
BMI	Body Mass Index
DHF	Dengue Haemorrhagic Fever
GSHS	Global School-based Student Health Survey
HE	Health Education
HIV	Human Immunodeficiency Virus
HPS	Health Promoting School
IUHPE	International Union for Health Promotion and Education
JAT	Junior Assistance Teacher
LGE	Local Government Education
MOE	Ministry of Education
MOH	Ministry of Health
MOHS	Ministry of Health and Sports
MOIP	Ministry of Immigration and Population
MPHC	Myanmar Population and Housing Census
NGOs	Non-Government Organizations
NHP	National Health Plan
PAT	Primary Assistance Teacher
SAT	Senior Assistance Teacher
SD	Standard Deviation
SEA	South-East Asia
SEARO	South-East Asia Regional Office
SHP	School Health Programme
STH	Soil Transmitted Helminthiasis
UNESCO	United Nation Educational, Scientific and Cultural Organization
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations International Children's Emergency Fund
WHO	World Health Organization



# **CHAPTER I**

## **INTRODUCTION**

Health is one of the important parts for development of a country. Schoolchildren are the future productive group of a nation. Good health is most important for learning and cognitive ability. Nowadays, schools community provide efficient human resources of a society and that are vital institutions of the. Children and youth are recognized as priority population of a country. Schools are dynamic setting for promoting health and entry point for enabling children to grow into healthy adults. Health Promoting School (HPS) is World Health Organization (WHO) initiative. In Myanmar, health promoting school was initiated since 1996 and schools in the whole country were covered with health promoting school programme since 2006. As the education sector, school teachers become the fundamental implementers of health promoting school activities.

### **1.1 Rationale of the Study**

The national development depends on the academic success and optimal health and well-being of its children and youths. Myanmar has an aspiration toward sustainable and inclusive development that health and well-being of the people are at the center of development. Investment on health is related to educational achievement, quality of life and economic productivity. Encouraging health through basic education setting is the best cost-effective activity that creates sustainable outcomes. A synergic interface between the health service sector and the education sector from the central to the grassroots level is a basis for promoting people's health, enhance health literacy, enabling people to access health and education services at all levels (MOHS, 2016).

According to Myanmar age structure 2014, population estimated percentage of age less than 15 years is 28.6% of total population. Among them 3.4 million are currently attending school, age between 5 - 9years (MOIP, 2015). Schools are important settings for comprehensive health promotion. Education and health are

support and enhancing with each other, it could not be possible alone. By supporting the education and health in school, it may increase life expectancy, literacy, productivity and achieve a better quality of life for all.

The general trend of WHO's Global School Health Initiative was guided by Ottawa Charter for Health Promotion (WHO, 1995). Ottawa Charter focuses on healthy public policy, supportive environment, and development of personal skills and strength of health service. Health Promoting School Initiative (HPSI) was based on the interrelationship between education and health. Health Promoting School Initiative aimed at aggregate the number of schools which were actually health promoting and hence contributed to the overall development and well-being of children, teachers, parents and the community (MOH, 2008).

Teachers play actively cooperating and collaborating with school health teams as key players in school health services activities. They actively involve especially in preventive and promotive activities of comprehensive health care for schools. The Health Promoting School (HPS) programme initiated in Myanmar, with the objective of promoting the health standard of the entire students of the nation through comprehensive school health services, it can be facilitated by active involvement and participation of the educational staff (MOH, 2008).

In school health services, although school health teams take responsibilities of school health in the areas where they are assigned, the school teachers are needed to actively participate in these activities instead of school health medical personnel for the schools without coverage of school health teams. Several studies showed that training teachers in the use of a health curriculum improved their implementation of the programme. Teacher training also builds commitment, knowledge, skills and attitude that enable a teacher to use curricula effectively and efficiently. The Public Health Statistics stated that 93.8% primary school children received medical examination at school, in 2016. Access to sanitary latrine and clean water by students in school was needed for school health; 96.2% of schools were examined by basic health staff and school health team in 2016, 88% of schools had fly proof latrines with the standard ratio of 50 students to 1 latrine, 86.5 % of schools had clean water source. School plays a critical role of improving health of children and adolescence, thus school create environment that support healthy life style, healthy behaviour and life skill abilities (MOHS, 2016).

The school teachers should have abilities to coordinate and cooperate with health care providers in school health teams, to contribute promotive, preventive and curative activities in school health. Especially primary school teachers are the most important persons in school health activities because primary students are basic for life skills education and health promotion.

The Health Promoting School Programme is in keeping along the track of health promoting school up to the community level as the programme aims to improve the health and wellbeing of entire students. The education sector plays the ownership role and the health sector is mainly providing the technical support for implementation of the (9) components of health promoting school. This ongoing process was found to have some improvement yearly.

This study was conducted on the primary school teacher and it focuses to identify knowledge, attitude and practices of the primary school teachers regarding in health promoting school activities. Then it could expose the school teachers who perform HPS activities independently or work together with school health teams. Primary schools are key setting for health promoting activities. The school teachers have more chance of close contact with the students than health personnel in school health teams. They have received health training during teachers training course and refreshers courses. "Life Skills Education" training programmes are also being implemented since 2006, under the guidance of Education Planning and Training Department with UNICEF. As in the educations sector, school teacher are essential implementer in HPS activities. This study would have supportive in evaluation and further improvement in implementation of programme of health promoting school.

Hence, understanding the level of target population on health promoting school activities is needed in Myanmar. Strategic planning and formulating designated behavioral implementation would be carried out school teachers at the basic education schools. Therefore, this study aims to analyze the knowledge, attitude, and practice regarding health promoting school activities among primary school teachers so as to improve health knowledge and better practices of healthy life behavior of school teachers with positive attitude upon health promoting school programme in Myanmar. By means of upgrading school teachers, students will also have done healthy life style in their community. After that those students will be brought up as healthy and productive workforce of the nation.

## **1.2 Objectives of the Study**

The objectives of the study are to identify the knowledge, attitude and existing practices of school teacher regarding health promoting school activities and to assess the relationship between socioeconomic characteristics of primary school teachers and their level of knowledge, attitude and practices towards health promoting school programme.

## **1.3 Method of Study**

This study used cross sectional descriptive study design, to find the current level of health knowledge, explore attitude towards health promoting school programme and their practices. It was carried out primary school teachers in Post-Primary schools and Primary schools at Hmawbi Township. Simple random sampling is used to select the sample respondents from each primary school. Total 193 primary school teachers were randomly selected. Both primary data and secondary data were used in this study. Survey questions were made up of four parts that included socioeconomic characteristics, knowledge, attitude and practices assessment questionnaires for health promoting school programme. Primary data was collected from the survey method using self-administered questionnaire and secondary data was obtained from corresponding Primary schools and published reports, journals, etc.

## **1.4 Scope and Limitations of the Study**

This study was conducted in Hmawbi Township in Yangon Division. Primary school teachers who had more than 2 years of experience in teaching were selected. Primary schools that have at least 5 teachers were included in this study. Data collection was carried out from April 2019 to June 2019. This study was done public post-primary schools and primary schools, not involved private school setting and monastic schools. Time limitations for collecting assessments during this period because of some teachers were busy with their work related education programme such as refresher course and students enrolling tasks.

## **1.5 Organization of the Study**

This study is organized into five chapters, the introduction of the thesis, rational of the study and objectives of survey, describes methodology and scopes and limitations of the study are presented in the Chapter one. Chapter two describes

literatures of health promoting school programme and reviews of previous studies. Chapter three presents the current health promoting programme in Myanmar, improvement and gap to successful implementation. Chapter four point out the analysis of the knowledge, attitude and practices of primary school teacher regarding health promoting school and discussion. Finally, Chapter five end with conclusion and the recommendation of this study.

## **CHAPTER II**

### **LITERATURE REVIEW**

#### **2.1 Basic Concept of Health Promoting School**

School health services have developed from the narrow concept of medical examination of school children to the wider concept of comprehensive care of health and well-being of children through the school year and beyond schooling. In 1838, the school health services started in France by providing of school buildings and appointment of part time physician for regular medical examination of all students. Promoting the health of children through basic education schools is an important goal of WHO, UNESCO, UNICEF and other international agencies since 1950. Major international efforts promoting school health include the WHO Expert Committee on school health services in 1950, the WHO Expert Committee on health education in 1954 (WHO, 1996).

In the early 1960s some number of conferences and meetings took place between the WHO and the United Nations Education, Scientific and Cultural Organization (UNESCO) that determined how could be improve school health. A publication was released after 1966 which was one of the first international documents to address pragmatically the planning and implementation of school health programmes (Leger, 2000).

WHO's Global School Health initiative seeked to mobilize and strengthen health promotion and education activities at the local, national, regional and global that launched in 1995. A health-promoting school was places where all members of the school community work together to provide students with integrated and better experiences and structures which promote and protect their health. The definition of HPS is "A health promoting school is a school constantly strengthening its capacity as a healthy setting for living, learning and working". Health promoting in the school is one of the important activities for the schoolchildren (WHO, 1995). The Regional guidelines was formulated to develop health promoting school as a frame work for series of action that indicated some advantages.

There are many advantages in health promoting school concept, that are-

1. HPS utilizes a holistic model of health, including interrelationships between the physical, mental, social and environmental aspects.
2. It involves participation of families in the development of skills and health knowledge of their children.
3. It indicates the characteristics of physical environment (e.g. buildings, sanitation, fresh water, play areas) in contributing to children health and then recognizes the importance of the school society by supporting a positive learning environment and one in which healthy relationships and the emotional well-being of students are strengthened.
4. Regional and local health services are linked with the school to address specific health concerns which affect schoolchildren (e.g. worm infestations, sight and hearing problems, malaria, psychosocial stress).
5. It focuses on active participation of school children in the formal curriculum to improve a range of life-long healthy behaviour and knowledge.
6. It enhances equity in education and health in increasing the health competencies of women in the community.
7. It provides a positive and supportive working environment for teachers and school health services.
8. It enables the school and the local community to collaborate in health initiatives which benefit school students, their families and community members (WHO, 1996).

The purpose of health promoting school is to enhance educational outcome and to facilitate action for health by building health knowledge and skills in the cognitive, social and behavioral domains.

The concept of health promoting school is to promote developed learning health and to focus the importance of health teaching, among teacher, community, and leaders. Teachers are adequately prepared for their role as key participants in health promoting schools, pre service and in-service programmes on health promotion (e.g. short courses, workshops with refresher and update opportunities) are provided to teachers. Moreover, they are supported by receiving adequate information, on an ongoing basis, about the availability of useful health resources.

The main objective of school health service is the promotion of health and well-being of the students as well as the prevention of illness. It consists four parts that are early detection and care of students with health problems, development of healthy attitudes and healthy behaviours by students ensure a healthy environment for school children in school compound and prevention of communicable diseases at school.

Holistic approach to the health of school children will ensure proper learning ability of the students and it becomes ultimate help in development of the nation. It is an investment of the society and makes a creative and protective capacity of young people. In addition to, healthy school system will also help in creating a sustainable social, healthy and peaceful human nature. Health of the students can be ensured if all our schools become “Health Promoting Schools”. Healthy school system supports a unique opportunity to reach the children and their families with health messages (Saraswathy, 2007).

## **2.2 Health Promoting School Programme**

The Health Promoting School Initiative (HPSI) is based on the interrelationship between health and education. It aims at increasing the number of schools which are truly health promoting and hence contributes to the overall development and well-being of children, teachers, parents and the community. “Successful implementation of HPSI therefore, using collaborative and participatory approaches, contributes to the achievement of the global goals of Education for All (EFA) and Health for All (HFA)” (WHO, 2006).

The focus of the Declaration of Alma Ata “Health for All by the Year 2000” prompted a closer examination by governments and health authorities on how this could be achieved (WHO, 1978). Sustainable Development Agenda emphasized that policy and better implementation are crucial for healthy cities and communities are critical settings for health, and health literacy empowers and drives equity through actions across sectors in the 2030. One of the important actions that can be achieved through school settings that enabling children, parents, educational staffs and communities to attain health information with good knowledge to apply and appropriately use to tackle health concerns in their day-to-day life is health literacy (WHO, 2016).

Health Promoting School programme consists of six areas-



1. School policy and management
2. Curriculum, teaching and learning
3. Health services and health activities
4. Healthy and safe environment
5. Active participation of student; and
6. Community participation and services (WHO, 2016)

The Health Promoting Schools Framework established by the WHO, South East Asia Regional Office encourages an entire school approach to lecturing health issues. So that promote the health standards of the entire student, the skills and knowledge needed for adopting a healthy lifestyle, the following strategies were developed based on the national health policy:

1. Conducting refresher training for teachers and BHS on the development of health promoting schools to promote the health standards of the entire student youth, the skills and knowledge needed for adopting a healthy life style at all levels.
2. Enhancing better quality and coverage of school health care by providing sufficient manpower and supplies.
3. Establishing school health committees at different levels for monitoring and evaluation mechanisms to ensure successful implementation.
4. Conducting research on the impact of school health programme to promote existing school health activities.
5. Promoting co-ordination and collaboration mechanisms with ministry of education and other related departments.
6. Organizing resources for national school health programme through the involvement of local and international NGO's and international organizations (UNICEF, 2013).

New organization structure for school health is recently developed by the government in response to the governance structure showed strata of implementation teams to be set up. By formatting the new structure, there will be five levels of school health committees: central school health committee, state and regional school health committee, district school health committee, township school health committee, and school level school health committee.

### **2.3 Essential Elements of Promoting Health in School**

Some studies show that trained teachers in the use of a health curriculum improve their implementation of the programme. Teacher training also builds commitment, understanding, skills and attitude that enable a teacher to use curricula effectively and comfortably. A comprehensive training programme should have four broad goals the first is to develop positive attitude toward comprehensive approach to school health and the second is to increase understanding of principles of behavior change that are effective in health education and then the next one is to improve teaching skills in areas such as class discussion, role playing, cooperative group activities, family communication activities, games, simulations and case studies and the last is to prepare teachers to deal with sensitive issues and refer students with additional needs (WHO, 1996).

A Health Promoting School has six essential components, is based on the World Health Organization's Ottawa Charter for Health Promotion.

#### **(a) Healthy School Policies**

Health promotion and well-being are clearly defined in documents or in accepted practices. Health and well-being are promoted by numerous policies some policies that enable healthy food practices to occur at school and some policies which discourage bullying.

#### **(b) Physical Environment of School**

The physical environment refers to the buildings, grounds and equipment in and surrounding the school, such as: the building design and location; the provision of natural light and adequate shade; the creation of space for physical activity and facilities for learning and healthy eating. It also refers to: basic facilities for physical environment of school such as maintenance and sanitation practices that prevent transmission of communicable disease; safe drinking water availability; free of air pollution; as well as any environmental, biological or chemical contaminants detrimental to health.

#### **(c) Social Environment of School**

The social environment of the school is a combination of the quality of the relationship among and between health services staffs, school teacher and students. It is influenced by the relationships with parents and the broader community.

**(d) Individual Health Skills and Action Competencies**

This aims to both the formal and non-formal curriculum and associated activities, where students get age-related knowledge, attitude, skills and experiences, which enable them to build competencies in taking action to improve the health and well-being of them-selves and others in their community, and which enhances their learning outcomes.

**(e) Community Links**

Community links are the connections between the school and the students' families plus the communication between the school and main local groups and individuals. Appropriate consultation and participation with these stakeholders heightens the health promoting school and provides students and teachers with a context and support for their actions.

**(f) Health Services**

These are the local and regional school-based or school-linked services, which have a responsibility for child and adolescent health care and promotion, through the provision of direct services to school children (including those with special needs). They include:

- (i) screening and assessment by licensed and qualified practitioners;
- (ii) mental health services (including counselling) to promote students' social and emotional development; to prevent or reduce barriers to intellectual development and learning; to reduce or prevent mental, emotional, and psychological stress and disturbances, and to improve social interactions for all students (IUHPE, 2008).

**2.4 Benefits and Barriers to Implementing Health Promoting School Programme**

There are numbers of potential and real benefits of health promoting schools programme. Those are related to benefits which should occur if schools had a comprehensive framework for school health which includes skill of school staffs, physical and social environments, integrated health services, attention to equity issues, community partnerships, and active involvement of parents. There were two types of beneficiaries; direct beneficiaries and indirect beneficiaries. Direct beneficiaries were school children, teachers and the schools. Indirect beneficiaries were the family and community.

The benefits of schoolchildren were achieving knowledge, beliefs, attitudes, values and skills that may be needed to avoid risky behaviours and live in healthy life. They also gained benefits by getting practices in activities of participating groups to achieve health and wellbeing. The school and teachers obtained benefits by having health related learning experiences through as a part of school curriculum. The school benefits from the reinforcement of school environment and from the opportunity to obtain resources in provision of school health education from a wide range of organization with specific interest in promoting health and preventing health problems as part of a comprehensive approach to school health education (Htet Sander Kyaw, 2013).

Health promotion programme assist schools to encounter their targets in educational attainment and meet their social aims; children that attend school have a better chance of good health. Schoolchildren who feel healthier society about their school and they are connected to adolescence and adults who are less likely to undertake bad habits and are likely to have better learning outcomes.

The family also gained benefits for the children possessed a great of health knowledge and skills that can be used to improve knowledge, attitude and good healthy behaviours at home. The community received benefits by increasing perception among community members for health problems and their solutions.

For health promotion of school, school should pull together the resources of community, agencies and services. They introduce the health information and health promotion strategies and teach good health behaviours that will be applied through the life.

School provides education and curricula that promote the quality of students in knowledge, attitude, value and practice of healthy life style. School health teams collaborate with township health care services to prevent health threats and correct health deficits. Schools are also practice area for the staff and they get experiences and model effective area of health promotion setting for the benefit of all educational staffs and ultimately the students (WHO, 2013).

In this time School health promotion is important in world-wide because of healthy young people are more likely to learn more effectively in education. Educational achievements are not separately linked to health, quality of life, and economic productivity. By attaining health-related knowledge, values, skills, and

practices, children can be empowered to pursue a healthy life and to work as agents of change for the health of their communities. (Ratnaprabha, Kumar and Kumar, 2018)

One of the major barrier to ‘successful’ school health programmes is lack of pre-service teacher training. Some barrier to health implementing health promoting programme are as following.

1. Some school health initiatives in the past have been funded over a short project base, contain unrealistic expectations and/or do not take a whole school approach.
2. Health promotion outcomes occur in the medium to long-term.
3. Evaluation is difficult and complex.
4. Health sector funding often risks distorting a health promotion approach to a traditional public health agenda of morbidity and mortality.
5. The education sector has certain language and concepts, which have different meanings to those in the health and other sectors, and vice versa. Time, partnerships and mutual respect are needed to build a shared understanding.
6. The necessity to provide the education sector with evidence about the advantages a health promoting strategy can offer schools in improving educational outcomes.

There is slight attention in the literature to policy of school health and it is difficult to identify evidence to provide the efficacy of establishing health in school-based policies. It is important to indicate that health promotion and education is a way to improve health and to help students succeed in education. Teachers should receive specific types of education to ensure the sustainable development in health education and promotion and they have a definite key role to perform instead of the ubiquitous “fragmented” type of health related education staff training programme.

Such barriers are related to resources; political issue; environmental contests; administrative support; trained and skilled teachers; luck of understanding of the importance of school health and the poor perceptions on school health activities. The involvement of leadership by teachers in health promotion has always been classroom based. The multi-pronged approach to health promotion in school by WHO suggested that teachers would become more proactive outside the classroom in working with other key stakeholder in the school community (Leger, 2000).

## **2.5 School Health Promoting Activities in South East Asia**

An inter-country consultation on health promoting school in the South-East Asia Region was proceeded in Maldives in 2000. WHO Regional Office for South East Asia (SEARO) developed guidelines for developing health-promoting schools and printed in 2003.

In the report of Inter-country workshop, Bangkok, presented the main purpose of the health-promoting school is to build health knowledge, skills and behaviours in the cognitive, emotional, social and behavioural domains and to enhance educational outcomes among learners. South-East Asia Region countries had been faced challenges in integrating health topics into the school curriculum besides how to exhibit the effectiveness of HPS activities. India, Maldives Myanmar, Nepal, Sri Lanka and Thailand have implemented components of the HPS programme. These countries shared their experience in (WHO, 2008).

In Bangladesh, the Bureau of Health Education under the Directorate-General of Health Services conducted training for school teachers and community leaders to provide health education in basic primary and secondary schools. And, life-skills-based reproductive health education using the peer education approach has been undertaken by the Ministry of Education to empower young people (WHO, 2008).

In Indonesia, health promoting actions were implemented with community base participation to reduce infections and re-infections in 1998. Both the Ministries of Health and Education have provided the de-worming programme as part of school health services. The collaboration with UNICEF has extended the promotion of life skills education as an integral part of health promoting school activities in primary, secondary and high schools in 2003 (WHO,2008).

In Bhutan, comprehensive child and adolescent SHP was established in 1998, in the developing school health programme, they were challenged with lack of a well-defined school health policy, implementation, referral systems and support mechanism, effective curriculum and manuals, training programmes for teachers and other support staffs.

Since 2002, school health policies and strategies aimed at preventive health education, specifically health of pupils and providing regular health checkups, have become a national priority in India. Like other regional countries, they had same problem. These challenges included the coverage of health problems, nutrition and health education in the school curriculum, health screening through regular check-up

and early detection, provision of relevant medical and health service, cost of school health referral system, training of teachers to handle minor health needs (WHO,2008).

Nepal SHP was success that students and teachers are playing an important role as significant sources of health service information. Challenges remain in establishing health promoting schools in both the government and private sector, as well as establishing sustainable coordination and partnership among key players with limited resources(who,2008).

The Ministry of Public Health in collaboration with the Ministry of Education oversees the implementation of the HPS programme was stated in the National Development Plan in Thailand. The national committee established a national plan and assigned cooperating agencies to implement activities funded by the government budget. All schools throughout the country have been targeted to be the implementing the health promoting school project by the year 2006.

Malaysia started School Health Promotion in 1967; similar challenges are faced in this country: there is generally a lack of time and interest from schools for health promotion. Singapore health promoting school initiative was launched in 2000. The health promoting school (HPS) concept was introduced five years ago. Various innovative methods are being used by schools in the implementation of this programme (WHO, 2008).

In the region of South Asia, India also has School Health Programme under the guidance of National Rural Health Ministry with special focus on 18 States of India. School health service in India concerns with health service which is an economical and powerful means of reaching student community health. It has developed during the past 70 years. In the present day, concept of comprehensive care of the health is broader and wealth being of children throughout the school years (Felixm, 2008)

## **2.6 Review on Previous Studies**

A cross sectional descriptive study “An evaluation of the role of elementary school teachers in Kuwait in promoting health” was conducted to 375 teachers randomly selected from elementary school in Kuwait to explore the perceptions of teachers on school health promotion activities in 2007. In this study, 63.9% of teachers strongly felt that health education plays foundation for healthy habit in the future and nearly 60% of teachers strongly agreed that sanitation facilities

support healthy environment in school. The study showed that highly significant differences in perception of teacher regarding school environment, health education and role of teachers (Amari, 2013).

A cross sectional descriptive study “Knowledge, Attitude, and Practice of School Health among Primary School Teachers in Ogun State, Nigeria” was conducted in 2015. There were 228 respondents in urban, Ifo LGA and 231 respondents in rural, that determined and compared knowledge, attitude and practice of the school teachers in health programme in urban and rural schools in Ogun state, Nigeria. More than half of the respondents, (urban 57.0%, and rural 54.5%) had poor knowledge of school health. Majority of the respondents in urban (98.7%) and rural (98.3%) felt that the school health programme was desirable needed.. School health programme was in place in both (urban 77.3%, rural 73.2%) of total school in the selected area. However many key components are poorly practiced. This study recommended that school health programme to be more effective, the school teachers must make honest efforts at implementing HPS programme. However in both urban and rural government school under this study, most of the teachers had a positive attitude towards the school health programme (Odeyemi, 2015).

The present cross-sectional study was carried out in 520 rural teachers and 185 urban teachers with an aim of assessing health related knowledge, attitude and skills of secondary school teachers regarding school service in children. Of the rural school teachers, 10.38% received school health training as compared to only 7.57% urban teachers. First aid training was received by 84 rural in contrast to only 24 urban school teachers. Mean percent knowledge score was similar for rural and urban school teachers. Mean percent attitude score amongst all schools, irrespective of their location, was 90%. Mean percent practice score among rural school teachers was 86.67% as compared to 76.67% among urban school teachers. Teacher performance score (sum of knowledge, attitude, and practices towards school health) in rural teachers was 79.64%, while that in urban school teachers was 72.21%. According to this study, various levels of assessment should be done occasionally school teachers to get ranking of their knowledge level and accepting of school health activities. This study pointed that teachers should receive continued education and trainings related to health education, especially importance of first aid and hygiene (Chavan, 2018).

A cross-sectional descriptive study using both quantitative and qualitative methods in the study of role of primary school teachers on health promoting school



activities was conducted in Taunggyi Township in 2009 by Myo Min. In this study explored teachers who had received training on health promoting school got better knowledge score than who had not receive training. Besides, there was significant association between age of teachers and total practice scores. Elder age group school teachers were more likely to practice of health promoting school activities than younger teachers. In the qualitative assessments, this study showed that the success of health promoting school activities depend upon the efforts of class teachers and their students (Myo Min).

A cross-sectional descriptive comparative study of “Health Knowledge and Practices among Primary School Children in Yangon”, (Unpublished EMPA Thesis), Yangon Institute of Economics, Myanmar was conducted by Suu Nwe Soe. One hundred students from each an urban and a peri urban primary school randomly selected for this study. Health knowledge and practices of these students was assessed based on five aspects, nutrition, personal hygiene, environmental sanitation, disease prevention and physical activities. In proper personal hygiene, urban students had more knowledge than peri-urban students in percentage. However, more than half of students in each schools had average score in health knowledge (61% in urban and 70%in peri-urban). Although there is no obviously different in knowledge level, the practices of environmental sanitation urban school students had better practices than pre-urban school. It was indicate the need of supervision and proper guidance in practices section. To fill these gaps, awareness and promotion of school health activities should be conducted by strengthening the performance of school teachers and coordinating and cooperation among Parent Teacher Association, social capital and levels of school health commetees. (Suu Nwe Soe, 2012).

Next study was conducted by Ye Minn Htun, et al. (2012), cross-sectional descriptive study in Danuphyu township among school teacher showed that teachers with higher level of knowledge scores (60.7%) were found to have positive attitude more than the teacher with lower level of knowledge scores (52.8%). And then, the teacher had high level of knowledge (57.4%) were found to be better practice than the teachers with low level of knowledge (44.4%). It can conclude that the teachers with high level of knowledge score had good attitude and better practice skills in the school health activities (Ye Minn Htun, 2012).

In addition, another cross-sectional descriptive study was using both quantitative and qualitative methods, which was conducted in Taungoo Township for

assessment on health promoting school activities among the basic education high school in 2013. Those findings show that, 51.6% of teachers had high knowledge scores and 48.4% had low knowledge scores. That study also indicated that the teachers with high knowledge scores had more positive attitude towards health promotion school services and better performance in health promotion school activities. Regarding health promotion school activities, environmental sanitation activities were satisfactory although there was shortage of training and research activities among school teachers (Htet Sander Kyaw, 2013).

Lastly, a study of “Perception and Practices on Implementing the Health Promoting School Activities among Educational Staff in Pakokuu Township” was reviewed. There were 130 school teachers from 12 selected Middle School were assessed for quantitative study. More than half of teachers had knowledge (53.8%) and practices of HPS activities (50.8%) below the median level, it indicated that there were inadequate knowledge and practices in the HPS programme. Besides, poor cooperation between health and education sectors, inadequate school health training and week available resources were found in qualitative assessment (Shwe Sin Htike, 2017).

## **CHAPTER III**

### **CURRENT HEALTH PROMOTING SCHOOL PROGRAMME IN MYANMAR**

#### **3.1 School Health in Myanmar**

Nowadays Ministry of Health and Sports in collaboration with Ministry of Education has implemented School Health Promoting services. School health activities had been started since 1921 in Myanmar. School child health activities was organized in 1951 with 7 school health team, and then that was extended up to 72 school health team in 51 townships in 1981. The school health activities aims to improve the health of the school children, physically and mentally (MOHS, 2018).

In 1977-78, School health program has been involved in the first Peoples' Health Plan, as one of the community health projects in of the country. In 1996, according to changed concepts and situation of global partners with Global School Health Initiative, Myanmar adopted the concept of health promotion through schools. Aiming to promote the health standards of the entire students, the skills and knowledge needed for adoption of healthy lifestyle, Health Promoting School programme has been introduced into existing school health services since 1996 (MOH, 2012).

National Health Committee accelerated school health activities in 1998, then 180 townships were covered during two years. In addition, 285 townships had been extended in 2003-2004, and the last 29 townships were covered school health services in 2005. There were 8,734,613 students attended in 46467 basic education schools in 2017. Thus, to carry out Universal Health Coverage, schools were being the great opportunity Well-established Community because of school-children is one of the target populations to accomplish Sustainable Development Goals 2030. Health Promoting School programme has been implemented to promote safe and healthy school environment and bio-psycho-social-spiritual-intellectual wellbeing of school children through comprehensive school health strategy. That would be successes by

right knowledge, better attitude and active participation of school teachers and excellence coordination and collaboration of community health care services.

School health programme was strengthened by the strategies that have to carry out to promote public awareness for healthy school environment and government policies that provide human capital resources and that are commitment to promote health and education, to encourage supportive environments.

### **3.2 Comprehensive School Health Strategic Framework (2017- 2022)**

Comprehensive school health strategy was developed based on the context of National Health Plan (2017-2021) for next younger generation, which comes from both education and health of students through holistic health promoting school approach, influencing health of students especially from families and communities.

The vision of Comprehensive School Health Strategic Framework (2017-2022) is to promote physical, mental and social health of entire students and the Mission is to develop Health Promoting Schools for learning and working environment for all education families(MOHS,2016).

Purpose of this strategy is to provide systematic framework to promote physical, mental and social health of entire students and promote healthy behaviours to prevent communicable and non-communicable diseases as well as determinants of health and risk factors to prevent diseases through comprehensive health promoting school approach.

There are four major strategies in Comprehensive School Health (CSH) strategy (2017-2022). They are-

Strategic 1: Strengthen and develop health promoting school structure and system,

Strategic 2: Improve health and well-being through health literacy and services,

Strategic 3: Harmonize health and education through health promoting schools, and

Strategic 4: Strengthen community partnership in Health Promoting Schools

**Strategic 1** is fundamental to effective and successful interventions to improve child and adolescent health and that promote health to the whole community through basic education schools, students and teachers. Coordination and mobilization of resources must be needed.

**Strategic 2** is the main improvement of health promotion in school settings that include combination of school children, teachers, parents and participation of social capital.

**Strategic 3** is a bridge between health and education goals as well as approaches which have been utilized, promoted, or advocated for schools in the past, present and for future programmes.

**Strategic 4** includes cooperation not only by children's parents but also by community people because of partnerships with local communities are crucial factors for the effective implementation and accomplishment of HPS programme (MOHS, 2016).

Primary targets of school health promoting strategic plan are school students aged 5-17 years (from kindergarten and Grade 1 to Grade 12). In order to ensure supportive environment for health and well-being of students, a comprehensive approach is applied to include teachers, school staffs, and parents as well as communities where there are possible (MOHS, 2016).

Environmental support is one of the important factor for students to maintain healthy life-styles within and outside schools. Primary beneficiaries of health promoting schools are students, teachers, parents and others are secondary beneficiaries. settings for parents, teachers and communities. To gain knowledge on healthy behaviour and practices, health promoting schools would also be important what they try to install in students. Every school approach would be used to reach goal of health promoting schools is target by 2022(MOHS, 2016).

There are four tentative targets in Comprehensive School Health (CSH) strategy(2017-2022): they are-

1. More than 90% of schools implement basic health promotion activities by 2022
2. More than 80% of schools implement basic health promotion with additional health services or activities by 2022
3. More than 65% of schools implement intermediate health promotion activities by 2022
4. More than 55% of schools implement advance level health promotion activities by 2022 (MOHS, 2016).

### **3.3 Health Promoting School Initiative**

Myanmar has adopted the concept of health promotion in school settings since the beginning of Global School Health Initiatives in 1996. Health promoting school programme was introduced into existing school health services aiming to promote

health standards for all students, the skills, and knowledge needed for adoption of healthy lifestyle. In principle, a health promoting school encompass to healthy school policies; school's physical and social environment; health education, skills, literacy, and health services; and community engagement. Mutual benefits of implementation of health promoting school are to achieve "Health for All" and "Education for All" as health condition of school children contributes to health-related activities and educational performance attract school enrolment. Besides, promote education of school children that can improve health condition of the entire population, extended from students, to parents, teachers, and communities.

Myanmar School-based Soil-Transmitted Helminthiasis (STH) control programme are accelerated with related health projects in highly participation such as School Health Project, Nutrition project, Maternal and Child Health Project and Lymphatic Filariasis elimination programme and Ministry of Education as well as WHO and UNICEF (MOH, 2012). The health status of the Myanmar population is poor and does not compare favorably with other countries in the region. Life expectancy at birth in Myanmar is 64.7 years, the lowest among ASEAN countries. 2016 Myanmar Global School-Based Student Health Survey (GSHS) stated that increasing rate of the prevalence of unhealthy behaviors such as unsafe dietary habits, that included eating junk foods (46%) and drinking carbonated soft drinks (45%), physical inactivity (30.2%), alcohol drinking (4.3%), and using tobacco (6.6%) among 13-17 year students. Hence we can conclude that as compared to previous survey conducted in 2007, the trend of unhealthy behaviours as well as mental health issue among students has been rising up. In addition to, Myanmar Health Management Information System reported in 2015, only 38.8% of schools covered health promoting school activities (MOHS, 2016).

Myanmar National Health Plan (NHP) (2017-2021) published in December 2016. According to the comprehensive school health strategy (2017-2022) both education and health sector have been developing based on the National Health Plan (2017-2021) for younger generation.

WHO's Expert Committee Recommendation on Comprehensive School Health Education and Promotion (1995), WHO Global School Health Initiative launched in 1995 -with the goals tend to increase number of health promoted schools. Health Promoting School can be characterized as a school constantly strengthening its capacity as a healthy setting for living, learning and working.

The structure of the School Health Division in Department of Public Health, Ministry of Health and Sport comprise of 4 Assistant Directors in the School health division;

1. Health promoting school,
2. School Health Program,
3. Adolescent Health,
4. Training and research

The number of schools, teachers and students in the basic education system in the (2015-16) Academic Year are listed in following table.

**Table 3.1 Number of Schools, Teachers and Students in Basic Education Level (2015-2016)**

<b>School category</b>	<b>No. of Basic Education School</b>	<b>No. of Basic Education Teachers</b>	<b>No. of Basic Education Students</b>
High	3,513	34393	873,832
Middle	6,224	129,945	2,795,607
Primary	35,650	158,176	5,184,041
Monastic	1,538	11,044	297,039
Private	438	7,397	107,451
<b>Total</b>	<b>47,363</b>	<b>340,955</b>	<b>9,257,970</b>

Source: MOE, National Education Strategic plan (2016-2021)

According to this table the amount of primary school teachers are nearly half of all teachers in Basic Educations and number primary school students are the highest then other categories, 55.9% of total students. (MOE, 2016)

Today, primary school enrollment rates are high and more schools are being constructed. However, less than half of all children in Myanmar currently complete primary school. UNICEF and its partners have helped more children attend daycare and preschool, helped improve the quality of care being provided to these children, helped more primary school children receive a quality education, and helped ensure that children are being taught fundamental life skills in the classroom through its Education program (UNICEF, 2018).

### **3.4 Current Health Status of School Children in Myanmar**

The Ministry of Health and Sports and Ministry of Education had joined to reform school health programme emphasis on health promoting and health literacy, environmental health and sanitation, disease prevention and injury and violence prevention.

Under the slogan of 1996 Global School Health Initiative, Ministry of Health has been implementing health promoting school programme which was introduced into existing school health services aiming into promote health standard for all students, skills and knowledge needed for adoption of healthy life style.

The implementation of the health promoting school covered all townships in 2006. At the foundation of school health promotion, together with other school based projects such as Tobacco free school project, Aedes free school project, school based prevention and control of soil transmitted Helminthiasis (STH) control program, etc., have been integrated in the current school health promotion program. In addition, the health promoting school programme is also gaining interest from local and international NGOs, and worked in close collaboration with their supports.

In the report of MOHS that health promoting school program since 2006 has covered 100% of schools. However, only 38.8% of schools are covered by Health Promoting School activities in 2015. Surveillance of Dengue Haemorrhagic Fever (DHF surveillance) in Myanmar showed 309 DHF cases among 2,890,451 students, while 86.9% of schools performed health education related to DHF. Larva control activities were conducted in 91.0% of school which include 66.0% of Abate schools and 13.6% of fogging. DHF prevention is one of the important measure that illustrated that need to be improved larva control activities in combination with health education in school is necessary.

Myanmar Global School-based School Health Surveys were conducted twice, one in 2007 and another in 2016. The surveys showed overall health behaviour and risk factors across spectrum of health among students age 13-15 years, ranging from dietary behaviours, hygiene, mental health, physical activities, alcohol and tobacco use, knowledge about Dengue Haemorrhagic Fever infection and violence and unintentional injuries. Generally personal hygiene of students in Myanmar, including hand washing before and after meal, as well as after using toilet, and tooth brushing, is in good coverage. Students who directly engaged risk behaviour were also low. However, they were exposed to tobacco as second-hand smoker from their



environment. Regarding physical activities and dietary behaviour, most students were not physical activities or having fruits and vegetables on regular basis. Associating with nutrition and physical activities, 7.6% of students were at risk for overweight and 18.0% of students were under weight. The double burden of malnutrition is clearly present in this country. School Health Division of the Department of Public Health is responsible for school health programme in Myanmar (MOHS, 2016).

### **3.5 Current Activities in Health Promoting School**

Health Promoting School programme, Ministry of Health and Sports, has been introduced into existing school health services since 1996 that aiming to promote the health standards of the entire students, the knowledge, attitude and skills in good health behaviour. In 2016 the Nine Domains of health promoting school programme was introduced. The following components were included.

1. School Health Education
2. School environmental sanitation
3. School-based disease control
4. Nutrition promotion and food safety
5. Medical examination including primary oral care and dental examination
6. Community outreach
7. Counselling and social support
8. Training and research
9. Sports and physical activity

(MOHS, 2016)

#### **1. School Health Education**

School Health Education is the transferring of health knowledge, preventive rick behaviors and implement good health practices to the students to get physical, mental and social wellbeing. Today, school health education was seen in comprehensive health curricula.

Health education is focus on three levels according to student education level. Main topics for those levels are different.

**Primary level:** personal hygiene, hand washing and tooth brushing, garbage free school, use of sanitary latrines, DHF prevention and control.

**Secondary level:** tobacco control, school environmental sanitation, school nutrition promotion and food safety, prevention and control of road traffic accident

**High School level:** reproductive health, sexually transmitted infections (STI), prevention and control of road traffic accident, tobacco and drug abuse, garbage free school (MOHS, 2018).

## **2. School Environmental Sanitation**

The following factors are included in performing school environmental sanitation.

- (a) building and surrounding of school (environment)
- (b) class rooms facilities
- (c) clean water supply and sanitation
- (d) school food counter
- (e) garbage and waste disposal method
- (f) sewage and fly free latrines

## **3. School-based Disease Control**

Under the school-based disease control there are three parts, prevention of communicable disease, prevention of non-communicable disease and accident and injuries. In the basic education school the head master and teachers have responsibility to inform that students who have signs communicable disease and incident of disease condition to nearest hospital or health care services immediately. School health committee emphasis on their school surrounding environment and check for cleanliness, drainage system, and proper waste disposal method. All also student personal hygiene and present health condition must be checked. During communicable outbreak or any time, report the list of the simultaneously student absentees to depart oh health (MOHS, 2018).

## **4. Nutrition Promotion and Food Safety**

School-based nutrition promotion and food safety

- a. Nutrition education, school feeding in selected townships
- b. School canteen food safety by health education and medical examination for food handlers in school canteen
- c. Biannual deworming, Iron and folate supplementation together with Nutrition Division

d. School food safety together with Department of Food and Drug administration (MOHS, 2018).

#### **5. Medical Examination, Primary Oral Care and Dental Examination**

School children medical examination would be done at least one time during a school year. It includes dental and oral examination, eye and ear examination, mental health and physical standard growth examination (MOHS, 2018).

#### **6. Community Outreach**

The school health program is also gaining interest from parents-teacher team, social capitals, local and international NGOs, and so has received support and has worked in close collaboration with them (MOHS, 2018).

#### **7. Counselling and Social Support**

Counselling is effective way to improve health problems related psychological and social matters in students, includes suggestion, reassuring, and giving guidelines. Counselling can be done by teachers, parents, relatives, health care providers and students as well, depending on situations. Communities can provide social support to alleviate the difficult circumstances that enabling children to attend school, to obtain education, learn, play and become healthy and productive youth and adult (MOHS, 2018).

#### **8. Training and Research**

School health training should be held yearly in township level and research programs for behaviours of students at risk. At township level, school health training will be taught to school head masters. And teaching programs should be done in every teachers training college in every year. Evidence-based school health interventions need to derive from national and local research that bring out the context and determinants of the success. Integrated research in strategic plan is part of management of school health programme and improving education, health and development (MOHS, 2018).

#### **9. Sports and Physical Activity**

School health programs can prevent non-communicable diseases and to improve persistent behavior for physical exercise and sports. Physical exercise will be effective for physical, mental and social well-beings of students especially in younger age. (MOHS, 2018)

School Health Manual was updated based on above components in (2016-2017) academic year. Educational staffs performed respective sectors of health

promoting activities under the guidance of Ministry of Education and of Ministry of Health and Sport.

The following table shows the status implementing of health promoting school activities in three contentious years, 2013 and later in 2014 and 2015 in annual Public Health Statistic Reports. In the report of 2016 Myanmar School - Based student Health Survey, there are six indicators being used to measure health promoting schools.

**Table 3.2 Implementation of the Contents of Health Promoting School**

<b>Indicator</b>	<b>2013 (%)</b>	<b>2014 (%)</b>	<b>2015 (%)</b>
Percentage of schools examined for school health care	91.8	92.9	92.8
Percentage of primary school children receiving school medical examinations	87.7	92.0	91.5
Percentage of schools with the full standard ratio (50:1) of fly-proof latrines	81.6	83.4	84.8
Percentage of schools with access to clean water	84.4	80.4	82.5
Percentage of schools with nutritional promotion activities	55.0	61.6	65.7
Percentage of schools with health promoting school activities	35.4	34.8	38.8

Source: DOPH Annual Public Health Statistics (2013, 2014, 2015) (MOHS, 2016)

From these indicators, more than 90% of schools have examined for school health care and primary school children receiving medical examinations. Standard ratio of 50 students per one fly-proof latrines, about 80 to 85% of schools are respectively compliance to standard ratio of fly-proof latrines and accessing clean water supply. Two-third of schools conducted the nutrition promotion activities including health education. However, less than 40% of schools implement health promoting school activities. Overall conditions were improved year by year in each indicator (MOHS, 2016).

## **CHATER IV**

### **SURVEY ANALYSIS**

This chapter presents the findings generated by descriptive statistical analysis of the survey data. The socio-demographic characteristics of the respondents and their responses on questions regarding knowledge, attitude, and practices are depicted with relevant tables and figures. Frequency and percentages are used to report and explained in the results to be able to meet the objectives under study. Before that, a brief on survey method and methodology are presented at the beginning of the chapter. This study included 193 primary school teachers who were randomly selected from 19 Post-primary schools and 23 Primary schools having at least five teachers in Hmawbi Township.

#### **4.1 Survey Profile**

This study was a cross sectional descriptive study conducted to access knowledge, attitude and practices of primary school teachers in Hmawbi Township of Yangon Region. The area of Hmawbi Township is 470 km<sup>2</sup>, density is 520.0/km<sup>2</sup> and the population is 244607, most of them (89.4%) are live in rural area (UNFPA, 2015). Under Township Education Administrative Office, it has 144 Basic Education Schools, specifically nine Basic High Schools, five Affiliate High Schools, three Middle Schools, three Affiliate Middle Schools 27 Post-Primary Schools and 97 Primary Schools in academic year, 2018-2019. Besides, there have eight monistic education schools in this area. These were not included in this study.

In these 144 BEHS schools, total number of students is 49321 including, 5733 high school students, 18014 middle school students and 25574 primary school students. In the Hmawbi Township 1308 teachers were appointed their basic education school in this 2018-2019 Academic Year; therefore, the required number of sample was obtained from this area. The population 5 years old children are 4120 (Male=2296. Female=1824) and total number of school enrolled in this academic year

was 2998 (Male=1508. Female=1490). This amount was 73% of under 5 years populations.

Table (4.1) shows the distribution of basic education schools, senior assistance teachers, junior assistance teachers, primary assistance teachers and total number of students in Hmawbi Township.

**Table (4.1) Number of Schools, Teachers and Students in Hmawbi Township**

School	Number of School	Number of SAT	Number of JAT	Number of PAT	Total	Number of Students
Basic High Schools	9	116	224	93	433	17284
Affiliate High Schools	5	62	62	48	175	4811
Basic Middle Schools	3	3	18	27	48	1586
Affiliate Middle Schools	3	1	14	26	41	1532
Post-Primary Schools	27		59	186	245	8531
Primary Schools	97		7	362	369	15577
<b>TOTAL</b>	<b>144</b>	<b>182</b>	<b>384</b>	<b>738</b>	<b>1308</b>	<b>49321</b>

Source: The report of Township Education office, Hmawbi, 2019

According to above table, average of teacher-students ratio is 1:38, and in primary level, teacher-students ratio is 1:36 in Hmawbi Township. The average value for the period during 1971to 2017 was 42.19 students per teacher and teacher-students ratio for the year 2017 was 1:23 in Myanmar. Thus, this condition is quite enough in effective teaching-learning process. Teachers would be more emphasis on behavior of their students by using student center approach method.

## 4.2 Survey Design

Self-administered questionnaire was used to collect the data for quantitative study. Table (4.1) shows total number of school teachers in Hmawbi Township. In

this study primary school teachers of post-primary school and primary school there have at least five primary school teachers were included. Among 27 Post- primary schools and 97 Primary schools, there are 22 Post-primary school and 19 Primary schools have at least five teachers. 364 teachers were posted in these schools. From each selected school, 193 teachers were selected proportionately according to the number of teachers from name list of registered book by using the simple random sampling procedure.

Pre-test structured questionnaire was used to collect the survey data, which is shown in Appendix. Before data collection, permissions were taken from the Hmawbi Township Education Administrative Officer and the Headmasters of the selected schools.

The selected respondents were explained about the purpose, procedure and objective of the study. Informed consent was also taken from the respondents, followed by questionnaire distribution.

The questionnaire used in this study included four sections. Development of this was based on intensive literature review relating to health promoting school activities. In addition, it was prepared from "Manual for School Health ", those were issued from Department of Health.

There were four sections in survey questionnaire.

- (1) Socio-Demographic Characteristic of respondents
- (2) Knowledge on health promoting school activities
- (3) Attitude on health promoting school activities
- (4) Practices on health promoting school activities

The first section includes the questions for the background information of the respondents. Specifically, it covers on the respondents' age, gender, education, rank, services, member of school health committee, attending health related training.

The second part focuses knowledge on health promoting school activities and it includes 14 questions groups relating to components of health promoting school activities and basic health knowledge. '10' components are related to health promoting school activities questions and the rest 4 are basic health knowledge questions. The responses were set as fixed choice responses such as "Correct; Incorrect, or Don't Know" responses. The correct knowledge responses were given as score '1' while incorrect responses and don't know responses were given as score '0'

The third section is regarding attitude towards health promoting school activities, which includes 15 statements, of which, 9 statements are provided as positive attitude and other six items are given as negative attitude towards health promoting school activities. 5-pointed Likert scoring system was used for these items, for which, score '5' was given for Strongly Agree; score '4' for Agree; score '3' for Undecided; score '2' for Disagree; and score '1' for Strongly Disagree for all positive statements whereas the reverse score was given for negative statements.

And the last section 12 numbers of the questionnaire were asking about towards practices of respondents on the health promoting school activities. Four practices present descriptive and other 8 practices questions were given scoring respectively.

Thereafter, pre-test was conducted with 12 primary school teachers at who are working at Myoung Dakar middle school, Hmawbi. Based on the pre-test results, the questions were modified and revised accordingly, to make it simple and understandable for primary school teachers.

### **4.3 Survey Findings**

This chapter analyzes the knowledge, attitude and practices of health promoting school activities among primary school teachers. The study was conducted to 193 teachers who are teaching primary school student Post-Primary School and Primary Schools situated in Hmawbi Township. Descriptive analysis was done on the socio-demographic characteristic finding, and their relationship of knowledge, attitude and practices score towards HPS activities of primary school teachers. It could to identify which had high score or low score in level of knowledge; positive or negative attitude and the performance of teachers were good or poor regarding on health promoting school activities.

#### **4.3.1 Socio-Economic Characteristics**

Concerning with the socio-economic characteristics of primary school teacher included with gender, age, education, rank and services of teachers were assessed in this survey.

Table (4.2) shows socio- economic characteristics of the respondents. And how many teachers attended health training and can be seen in Table (4.3) respectively. School based Life -Skill health education program was initiated since 2006 in Myanmar.



**Table (4.2) Socio-Economic Characteristics of the Respondents**

Characteristics		Number of respondents	Percent
Gender	Male	23	11.9
	Female	170	88.1
	<b>Total</b>	<b>193</b>	<b>100.0</b>
Age Group	20-30 years	148	76.7
	30-40 years	25	13.0
	>40 years	20	10.4
	<b>Total</b>	<b>193</b>	<b>100.0</b>
Education	matriculation passed	12	6.2
	Diploma	39	20.2
	Degree	142	73.6
	<b>Total</b>	<b>193</b>	<b>100.0</b>
Rank	Primary assistance teacher	148	73.6
	Junior assistance teacher	51	26.4
	<b>Total</b>	<b>193</b>	<b>100.0</b>
Services	<10 years	120	62.2
	10-20 years	46	23.8
	>20 years	27	14.0
	<b>Total</b>	<b>193</b>	<b>100.0</b>
Former School health committee member	Yes	85	44.0
	No	108	56.0
	<b>Total</b>	<b>193</b>	<b>100.0</b>

Source: Survey Data, 2019

Numbers of female teachers are obviously greater than number of male teachers in every school. The age of teachers is between 20 to 58 years with a mean age of 32.04 years. 76.7% of teachers were under 30 years of age. Mostly (73.6%) are graduated and nearly two-third of teachers had service duration is less than 10 years minimum service is 2years and maximum service is 36 years and a mean service of 9.67 years.

The following table presents the teachers who had been attend any health related training. Township level health promoting school programme course and

school level health promoting school programme course are opened annually in every township.

**Table (4.3) Attended School Health Related Training Course**

	Characteristics	Number of Respondents	Percent
Attended health training	Yes	86	44.6
	No	107	55.4
	<b>Total</b>	<b>193</b>	<b>100.0</b>
Attended Refresher Course	Yes	95	50.5
	No	98	49.2
	<b>Total</b>	<b>193</b>	<b>100.0</b>
School Level school health training course	Yes	40	20.7
	No	153	79.3
	<b>Total</b>	<b>193</b>	<b>100.0</b>
Township Level school health training course	Yes	30	14.6
	No	163	84.4
	<b>Total</b>	<b>193</b>	<b>100.0</b>
Life Skill Education Training	Yes	66	34.2
	No	127	65.8
	<b>Total</b>	<b>193</b>	<b>100.0</b>
First Aid Training Course/ Red Cross Training Course	Yes	24	12.4
	No	169	87.6
	<b>Total</b>	<b>193</b>	<b>100.0</b>

Source: Survey Data, 2019

It shows frequency distribution of attended school health related training. More than half of teachers did not attend school health related training course. About one –third of school teachers (34.2%) received training of “Life Skill Education”. This may be due to the lack of resources to give school health training of Department of Health. Besides, School-level health promoting school training course was relayed by School Head Master to teachers. Some Primary schools have five teachers; they may have difficult to attend above training. Beside, most of the teachers had attended the verity of training courses under the arrangement of MOE.

### 4.3.2 Knowledge on Health Promoting School Activities

Among the study population, 193 numbers of teachers are selected, and their level of knowledge was observed with minimum 45, maximum 90. The total mean score was 65.4, standard deviation was 7.78 and most frequent score they had 60 (31.1 % of teachers) and most of them were near mean score. There were 91 (47.2%) teachers with high level of knowledge score and 102 (52.8%) teachers with low level of knowledge score.

#### (a) Components of HPS Programme

This table shows knowledge regarding on the components of Health promoting school programme. HPS programme consist of (9) components, every school have done school health activities were based on these components.

**Table (4.4) Knowledge on the Components of HPS Programme**

No.	Items	Correct (%)	Incorrect (%)	Don't know (%)
1.	School-based Health Education	95.9	2.1	2.1
2.	School environmental sanitation	95.9	1.0	3.1
3.	School-based disease control	90.2	2.0	17.0
4.	Nutrition promotion and food safety	91.7	2.0	7.3
5.	Medical examination including primary oral care and dental examination	88.1	1.0	10.9
6.	Community outreach	57.5	7.3	35.2
7.	Counselling and social support	47.2	10.9	42.0
8.	Training and research	42.0	23.8	34.2
9.	Sports and physical activity	86.0	4.1	9.8

Source: Survey Data, 2019

According to above table (4.4) obviously see knowledge on components of HPS activities, most of the respondents could not answer all nine components of health promoting school completely; more than 95% of respondents answered the first two components correctly. They were well known health education and environmental sanitation. School based disease control and medical examination are carried together with school health committee under the guidance of township school health medical officer. Nutrition programme are provided with parents- teachers

association and community support. However some respondents could answer community outreach (57.5%), counseling and social support (47.2%) and training and research (42.0%). They could not give correct answer due to nearly half of respondents did not know these activities. It revealed that knowledge on components of HPS activities among primary school teachers was insufficient and need to be enhanced. Most of schools in rural area did not perform training and research, week in physical activities due to lack of physical education teachers.

**(b) Main Health Education Topics for Primary Level**

There are three main topics for health education in primary level, personal hygiene, proper methods of waste disposal and oral hygiene and dental care. Health education to primary school children is important in their life skill development.

**Table (4.5) Knowledge on Main Health Education Topics for Primary Level**

No.	Items	Correct (%)	Incorrect (%)	Don't know (%)
1.	Personal hygiene	100.0	0.0	0.0
2.	microorganism of disease	2.1	93.8	4.1
3.	Proper waste Disposal	98.4	0.0	1.6
4.	Oral hygiene and dental care	100.0	0.0	0.0
5.	Road traffic education	73.1	22.8	4.1

Source: Survey Data, 2019

All teacher give correct answer for the main topic for educating primary level students in personal hygiene, oral hygiene and dental care are most important in school age children. Nearly correct percentage proper waste disposal, it is good habit for practices of environmental sanitation. Thus, all teachers knew these topics are need for student health knowledge. Just 4(2.1%) knew that microorganism of the diseases was not contain in topics in primary level. But, in primary level, students should know some vectors of communicable disease (e.g. DHF transmitted by mosquitoes bite, flies carry bacteria of diarrhea). Although, road traffic education is not main topic, bot primary schoolchildren need to know basic knowledge of road safety, such as colours of traffic light and safety drawing lines.

**(c) Aims of School Environmental Sanitation**

Table (4.6) shows knowledge of respondents on aims of school environmental sanitation. School environmental sanitation is one of the important factors of clean school environment.

**Table (4.6) Knowledge on Aims of School Environmental Sanitation**

No.	Items	Correct (%)	Incorrect (%)	Don't know (%)
1.	To practice systematically dispose excreta	100.0	0.0	0.0
2.	To protect injury and accidents	83.9	15.1	1.0
3.	To perform personal hygiene by students themselves	97.4	2.1	0.5
4.	To provide mosquito free school	94.3	1.0	4.7
5.	To prevent disasters	17.6	78.2	4.1

Source: Survey Data, 2019

Regarding on knowledge about aims of environmental sanitation activities, respondents answered fully correctly in to practice systematically dispose excreta and garbage. Other aims of school environmental sanitation activities had been got nearly full percentage, except correct response to the questions of disaster prevention (17.6%). Students can do personal hygiene themselves and prevention of disaster are not relate in environmental sanitation.

**(d) Communicable Diseases that Transmit among Students**

The following Table shows knowledge of respondents on communicable diseases that transmit between students. Teacher should have adequate basic health knowledge then they can give correct health information to their students. Communicable diseases are spread in short period of time in crowed area but that can be prevented by early detection and prompt treatment.

**Table (4.7) Communicable Diseases that Transmit among students**

No.	Items	Correct (%)	Incorrect (%)	Don't know (%)
1.	Dengue Hemorrhagic Fever	83.4	10.9	5.7
2.	Tuberculosis	96.9	1.6	1.6
3.	Diarrhea	80.8	13.0	6.2
4.	Food poisoning	67.9	15.5	16.6
5.	Meningitis	39.9	42.0	18.1

Source: Survey Data, 2019

Except food poisoning, all disease will be transmitted by contamination. Most of the respondents knew Dengue Hemorrhagic Fever, Tuberculosis and Diarrhea are common communicable diseases. But, only 39.9% of respondents know Meningitis is communicable disease and 18.1% do not identify meningitis is communicable disease or not. Viral Meningitis can be infected by coughing or sneezing. So school teachers should have general knowledge about that communicable disease. And then 15.9% of respondents did not know food poisoning is not a communicable disease. It may be most of respondents did not have health related training course.

**(e) Basic Health Assessment and Examination Points of Personal Hygiene**

There are ten points to check personal hygiene, school teacher educate to their school children how to do that points and school health committee member teachers in their school checked routinely. Table (4.8) shows Knowledge on Examination points for personal hygiene of students.

**Table (4.8) Basic Health Assessment and Examination Point of Personal Hygiene**

No.	Items	Correct (%)	Incorrect (%)	Don't know (%)
1.	Physical Growth	96.9	0	3.1
2.	Incidence of Seasonal Disease	83.9	9.8	6.2
3.	Vitamin Deficiency	62.2	14.0	23.8
4.	Skin Infection	80.3	7.3	12.4
5.	Personal hygiene	100	0.0	0.0
6.	Daily tooth brushing	88.6	10.4	1.0
7.	Daily combing	84.5	14.4	1.0
8.	Weekly nail cutting	96.9	2.1	1.0
9.	Cleanliness of clothing	91.7	7.3	1.0
10.	Hand washing	81.3	18.7	0.0

Source: Survey Data, 2019

Basic health assessment must be done by school teachers for early detection and prompt reporting. 62.2% of respondents had known vitamin deficiency is needed to examine in primary school students, 23.8% did not know. However 98.9% of respondents have awareness for seasonal disease. All the respondents knew they have responsibility to examine personal hygiene of students.

The above facts, from question number 5 to 10 were most important check point for personal hygiene of schoolchildren. In this study 100% of school teacher knew personal hygiene is included in basic health assessment. They well known Personal Hygiene practices are important in children health. However, 85 numbers of teachers had experience in school health committee member. 14.4% of teachers were miss to check students who had combed or not daily. Only 81.3% of teachers checked student had done hand washing practice after toileting or before eating, although, they demonstrated step by step hand washing technique with poem and children practices follow by them. 96.9% of teacher correctly checked nail cutting weekly. And then 91.7% of teachers inspected their students clothing were clean.

**(f) Disease Prevented by Hand Washing Practice**

Hand washing practices can prevent many communicable diseases. The respondents were accessed which diseases are prevented by hand washing practices. General knowledge of teacher responded on preventable diseases as shown in following table.

**Table (4.9) Disease Prevented by Hand Washing Practice**

No	Items	Correct (%)	Incorrect (%)	Don't Know (%)
1.	Warm Infestations	95.9	2.0	2.1
2.	Diarrhoea	97.8	1.2	1.0
3.	Conjuntivitis	62.2	22.8	15.0
4.	Influenza	42.0	37.0	21.0
5.	Skin Infections	91.2	4.0	4.8

Source: Survey Data, 2019

Out of 193 teachers, 189 (97. 9%) knew that diarrhea is prevented by standard hand washing practice. Then, hand washing can prevent 185(95.9%) for warm infestation, 175(90.7%) for skin infection and 120(62.2%) for conjunctivitis of each respondents knew respectively. Besides, for the statement that the influenza can be

prevented by hand washing, just less than half of respondents had correct knowledge and 58% of respondents did not know about that.

**(g) Disease Transmitted by Mosquitoes Bite and Vector Born Control**

There are many disease transmitted by mosquitoes bite. Myanmar climate is venerable for multiplication of mosquitoes. Rate of Dengue Hemorrhagic fever is still rising in rainy season. Table (4.10) shows knowledge of primary school teachers on disease transmitted by mosquitoes bite and vector born control activities.

**Table (4.10) Disease Transmitted by Mosquitoes Bite and Vector Born Control**

No.	Items	Correct (%)	Incorrect (%)	Don't know (%)
1.	Japanese Encephalitis	74.6	13.5	11.9
2.	Dengue Hemorrhagic Fever	97.9	0.0	2.1
3.	Filarial elephantiasis	96.9	0.0	3.1
4.	Malaria	94.8	3.1	2.1
5.	Worm infestation	68.4	21.8	9.8
6.	Covered well and pots	99.0	1.0	0.0
7.	Instruct students to wear long sleeves	100	0.0	0.0
8.	Provide good ventilation and lighting	89.6	5.2	5.2
9.	Burning mosquitoes coils	59.1	29.0	11.9
10.	Landfilling the stagnant water	94.8	2.1	3.1

Source: Survey Data, 2019

Nearly 100% of respondents get correct knowledge about popular mosquitoes bites disease Dengue Hemorrhagic Fever, Filarial elephantiasis and Malaria. Filariasis elimination programme is started since 2001 (WHO, 2013). 74.6% of respondent have knowledge Japanese Encephalitis is caused by mosquitoes bite. 64.4% of respondents well knew Worm infestation is not related with mosquitoes bite. Deworming program is done twice a year in every primary school.

The majorities of respondents well knew about vector control methods, mosquitoes control methods were always educated in every school and public area by using all channel of media. However, about (40%) of respondents had incorrect knowledge, that is, burning mosquitoes coil is one of the effective method of



mosquitoes bite prevention. In the rural area most of people believe that smoke from burning herb, by means of traditional method could away mosquitoes.

**(h) Nutrition and Food Safety Programme and School Canteen**

Nutrition promotion is essential programme in primary school children. There are several methods in school nutrition programme. Adequate nutrition provides both physical and mental well-being of students. Accessing body weight and high can calculate Body Mass Index (BMI), and estimate overweight or under nutrition.

**Table (4.11) Nutrition and Food Safety Programme and Check Points of School Canteen**

No.	Items	Correct (%)	Incorrect (%)	Don't know (%)
1.	Selling readymade snacks at school food count	60.6	28	11.4
2.	School lunch box practices	86.0	4.1	9.8
3.	Teaching planting practice among school children	92.7	4.1	3.1
4.	Donating method	69.9	7.3	22.8
5.	Parent-teacher association method	74.6	10.4	15
6.	Sellers are free from communicable disease	89.1	6.2	4.7
7.	Keeping dust-ban with lid	99.0	0.0	1.0
8.	Selling Food must be clean and nourished	99.0	0.0	1.0

Source: Survey Data, 2019

Regarding on the knowledge of ways of giving nutrition effective to student, 92.7% of respondents accept teaching planting practice among school children but it is not directly effect of getting nutrients to school children. Nearly 70% of respondents knew donating method, and 74.6% of respondents knew Parent- Teacher Association method. However 86% of respondents know school effectiveness of school lunch box. These above three ways of schoolchildren nutrition programmes are related with each other, so cooperation with school, parents and community will success nutrition and food programme. 66.6% of respondents have wrong knowledge on selling readymade snacks at school food count is one of the methods of nutrition

programme. Really most of readymade -snack has less nutrients. Most of the respondents had good knowledge in school canteen checking. School canteen food safety programme was started by combine with Public health department, Ministry of Health and Sport since 2014. Approximately 100% of respondents knew dust-bans that are used in school compound and canteen must be with lids. 10.9 % of respondents have not knowledge for food seller in school canteen must be free from communicable disease.

**(i) Knowledge on Sanitary Disposal Methods**

Proper way of dispose sanitary and garbage disposal must be done to provide environmental sanitation. The following table shows how many teachers know sanitary disposal methods accordingly.

**Table (4.12) Knowledge on Sanitary Disposed Methods**

No.	Items	Correct (%)	Incorrect (%)	Don't know (%)
1.	Buried	100.0	0.0	0.0
2.	Composting	82.4	7.8	9.8
3.	Dumping	74.1	11.4	14.5
4.	Discard into the river or stream	77.2	10.4	12.4
5.	Municipal collecting	87.0	8.3	4.7
6.	Burning	56.5	38.3	5.2

Source: Survey Data, 2019

In regard to the knowledge question of sanitary disposed methods, the teachers who recognized that sanitary burial was one of the sanitary method were (100%), composting (84.4%), and municipal collection (87.0%). Buried method is most commonly used in rural area; however some distant area is far from municipal collecting. And then (74.1%) and (77.2%) knew that discard on land (dumping) and into the river or stream were not right sanitary disposal methods respectively. These methods are causative factors of soil and water pollution and inhibit the flow of water and then flood may be later. Burning method is old sanitary disposed method that causes air pollution and fire hazard. (56.5%) of respondents knew that burning method should not use.

**(j) Check Points of School Latrine**

Standard latrine must have constructed with four criteria; flies free; odor free; at least 50 feet away from well; adequate water supply and provide soap for hand sanitation. Standard ratio for school latrine is one latrine for 40 students. Finding of knowledge of respondents on check points of latrine were viewed in table (4.13).

**Table (4.13) Knowledge on Check Points of School Latrine**

No.	Items	Correct (%)	Incorrect (%)	Don't know (%)
1.	Odorless	86.5	3.4	10.1
2.	Enough water supply	89.1	4.9	6.0
3.	Keeping soap and towel	73.9	6.0	20.1
4.	Flies-free	81.1	7.6	9.5
5.	One latrine for(70) students	82.4	10.6	7.0

Source: Survey Data, 2019

Concerning with the Check points of school latrine, approximately 90% of respondents have known the criteria of sanitary latrine, that must be absence of odor and flies-off (86.5%), (81.1%) of teachers respectively. (82.4%) of respondents knew one latrine is not enough for (70) students. 20.1% of teacher did not known soap and towel must be placed in the latrine. This result may be due to influence of regional health knowledge or poverty of the region or inadequate health education to school teachers.

**4.3.3 Attitude on Health Promoting School Activities**

Attitude towards Health Promoting School Activities of the respondents was assessed with 5-pointed Likert items covering nine positive statements and six negative statements regarding health promoting school activities. The agree responses for positive items were given high score and disagree for those items were provided the lower score. Reverse scoring system was utilized for the negative items. Within a range of score 1 to 5, the higher score indicates positive perception on health promoting school activities while the lower score indicate the reverse meaning. As of mean score, the score of less than '3' represents on negative perception while the score of greater than '3' indicates the better perception. The neutral score was regarded for the score of '3'. Scores greater than 3 is positive attitude and Mean of

each variables are 3. The overall mean score for attitudinal items was obtained as 73.8 (SD=5.6) based on the highest given score of '90' and the lowest given score of '0' for that 18 attitudinal statements.

**(a) Positive Statement Regarding Health Promoting School Activities**

There are nine statements of positive attitude to access the attitude of primary school teachers in this study. Most of the respondents had positive attitude in each statement.

**Table (4.14) Positive Statements Regarding Health Promoting School Activities**

No.	Items	Mean Score	SD
1.	Parents should be involved in health education talks	4.53	0.58
2.	Examining of personal hygiene of children will be performed by school teachers	4.10	0.97
3.	Parent participation is needed, in formulating school lunch box program.	4.12	0.71
4.	Teachers should be attend to health related training (first aid, traditional medicine)	4.23	0.83
5.	Performing health promoting school activities get healthy lifestyle from school to community	4.16	0.59
6.	Health promotion school activities can get healthy living life-style for students	4.15	0.62
7.	School teachers are role model for children in practicing healthy living life-styles	4.24	0.42
8.	Tooth brushing after lunch practice programme of primary school children is needed.	4.20	0.64
9.	Health education is the one of the way of acute communicable disease prevention.	4.38	0.55

Source: Survey Data, 2019

SD= Standard Deviation

Above table shows mean score in attitude of respondents. Regarding 9- positive attitude statements, all items statements mean score were higher than the neutral score of '3'. Mean score greater than 4 indicate most of the respondents strongly agree on each statement respectively.

Thus, it shows generally most of the respondents had positive attitudes towards health promoting activities. The statement of “Parents should be involved in health education talks” got highest mean score, it shows most of the teacher agree with to success HPS program, health knowledge of parents are also important. The statement of “Examining of personal hygiene of children will be performed by school teachers” is responded in lowest mean score among these statements. Only 66 respondents were and 20 respondents answered disagree and strongly disagree. Most of the teachers agree and strongly agree with other statements.

**(b) Negative Statement Regarding Health Promoting School Activities**

There are six negative statements to access the attitude of primary school teachers in this study. The following scores were respondents have positive attitude expression, they answered disagree to this statements.

**Table (4.15) Negative Statement Regarding Health promoting School Activities**

No.	Items	Mean Score	SD
1.	Health promotion school activities should perform by medical person	3.16	1.33
2.	Discarding waste outside the school compound will become waste free school	3.67	1.29
3.	Selling student preferred foods in the canteen that would be nourish	3.64	1.1
4.	In primary school, these should be one latrine enough for 70 students	3.82	1.01
5.	For students, education is more important than health.	3.62	0.99
6.	Sports, physical exercises and social activities are not support for higher intelligence of children	3.88	1.01

Source: Survey data, 2019

Finding of table (4.15) mean scores was differed from table (4.14). All mean score were between 3 and 4. It indicates some respondents have negative attitude on these statements. The minimum mean score in the negative response statement of “Health promotion school activities should perform by medical person”, it shows nearly half of respondents heave negative attitude on that factor. It may be some of the teachers accept medical examination should perform by school nurse or doctor.

#### 4.3.4 Practice on Health Promoting School Activities

In this Practice section there had 13 practices assessment questions, including 3 questions about health educating giving practices, 6 questions for practices on checking students' performance and 4 questions about performance of teachers on school health program. In this study, practice questions were accessed by self-administered questionnaires, inserted by using performance checklist.

##### (a) Practices of Teachers on Health Educating Activities

The following table shows the practices of school teacher educate to primary students on health education about personal hygiene, environmental sanitation, and nutrition. Education of personal hygiene, sanitation and nutrition, more than 40% of respondents carried out always and another more than 40% had done often. Less than 15% had done some times and the last 5% was never done health education to the students.

**Table (4.16) Practices of Teachers on Health Educating Activities**

Activities	Always (%)	Often (%)	Sometimes (%)	Never (%)
Personal Hygiene	9.0	43.0	14.0	2.1
Sanitation	42.0	45.1	1.8	4.1
Nutrition	46.1	44.6	7.8	1.5

Source: Survey Data, 2019

##### (b) Checking Health Practices of Students

School teachers are responsible for checking the healthy behaviour of students, condition of classroom and school compound. The following table shows the practices of primary school teacher on checking health practices of students.

**Table (4.17) Practices on Checking Health Practices of Students**

No.	Activities	Daily (%)	Weekly (%)	Monthly (%)	Never (%)
1.	Checking students' personal hygiene	44.0	51.8	2.1	2.1
2.	Checking class room sanitation	93.8	5.2	0.0	1.0
3.	Checking cleanliness of drinking water including pot, lid and cup	88.1	(3.6%)	3.1	5.2
4.	Checking cleanliness of latrine	76.2	15.0	1.0	7.8
5.	Checking disposed garbage at recommended place.	83.4	11.4	1.0	4.1
6.	Checking school canteen for food safety	40.4	28.5	8.3	22.8

Source: Survey Data, 2019

Table (4.17) showed practices of primary school teacher on checking students' performance and checking school canteen. Personal hygiene checking is daily activity, but (100) of respondents checked student' personal hygiene daily, 85 respondents done weekly. Here checking canteen for food safety frequency score seen in this was poor, because of some of the school does not have school canteen. It will be clearly define in observational check-list study.

**(c) Monitoring Height and Weight of Students**

The following table shows practices of monitoring height and weight of students. The question of "Did you have Practices of monitoring height and weight of students how many times in a year?"

**Table (4.18) Practices of Monitoring Height and Weight of Students**

Categories	Number of Respondents	Percent (%)
Monthly	16	8.3
Quarterly	55	28.5
Bi-Annual	57	29.5
Not done	16	8.3

Source: Survey Data, 2019

Table (4.18) describes practices of primary school teacher participation in school nutrition programme. The following scores are obviously differ-from above facts; it would not be good score for Practices of monitoring height and weight of students. Monthly practices is done by 8.3% of teachers, but 28.5% have done three -monthly monitoring height and weight of students. Although the maximum percent among them have done Six-monthly 29.5% but another 8.3% was not done this activities.

**(d) Participation on Nutrition Programme**

Every school performs nutrition programme which have been implementing according to the local condition.

**Table (4.19) Practices of Primary School Teachers on Nutrition Programme**

<b>Classifications</b>	<b>Number of Respondents</b>	<b>Percent (%)</b>
Weekly	8	4.1
Bi-Monthly	10	5.2
Monthly	73	37.8
Six Times per Year	15	7.8
Three Times per Year	61	31.8
Not-done	26	13.5

Source: Survey Data, 2019

This table describes practices of primary school teacher participation in school nutrition programme. The following scores are obviously differ-from above facts; it would not be satisfactory score for school nutrition programme. Weekly practices is done by 4.1% of teachers, but 31.8% have done three -monthly in nutrition program. Although the maximum percent among them have done monthly is only 37.8%, this percent is not more than half of respondent. (1.3%) of teachers was not done.

**(e) Leading Student to Collect Garbage Disposal**

School teachers who had led their students that provide to implement waste-free school were assessed in the practices section of this study.

As shown in table, 67% of school teachers had how many times led their student to collect garbage disposal in environmental sanitation and practices of healthy living style. 28% of school teachers answered they have done sometimes. Only 1% of teacher has never been this activity.



**Table (4.20) Practices of Leading Students to Collect Garbage Disposal**

<b>Classifications</b>	<b>Number of Respondents</b>	<b>Percent (%)</b>
Always	129	67.0
Sometimes	54	28.0
Often	8	4.0
Never	2	1.0

Source: Survey Data, 2019

#### **4.3.5 Relationship between Characteristics of Primary School Teachers and Knowledge, Attitude and Practices Scores in Health Promoting School Activities**

The second objectives of this study was to identify the relationship of socio-demographic characteristics of primary school teachers and their Knowledge, Attitude and Practices level towards health promoting school activities.

##### **(a) Knowledge Level of Primary School Teacher in Health Promoting School Activities**

In this study knowledge level of teachers were also analyzed. The highest score of knowledge was 134, and the lowest score was 0 given in this study. Low level of score and high level of score were divided by mean score. Table (4.21) and Table (4.22) show the relationship between socio-demographic characteristics of primary school teachers and their knowledge level.

**Table (4.21) Level of Knowledge towards Health Promoting School Activities**

	<b>Level of score</b>	<b>Number of Respondents</b>	<b>Percent</b>
<b>Knowledge</b>	Low	102	52.8%
	High	91	47.2%
	Total Score -	134	
	Mean -	65.39	
	Standard Deviation -	7.78	

Source: Survey Data, 2019S

Among the 193 teachers, levels of knowledge were 91 (47.2%) teachers with high level of knowledge and 102 (52.8%) teachers with low level as shown in Table (4.21). Level of knowledge was observed with minimum 45, maximum 90, mean

65.4, standard deviation 7.78 and most frequent score they had 60 (31.1) % of teachers) and most of them were above mean scores.

Total scores of knowledge score is 134, low score and high score are divided by mean score, greater than 65.39 is high level knowledge score and lower than mean score is noted as low level knowledge score. The following table shows relationship between characteristics of Primary School Teachers and their level of knowledge score.

**Table (4.22) Relationship between Characteristics and Knowledge**

Background Characteristics		Knowledge Score			
		High (n=91)		Low(n=102)	
		Respondents	Percent	Respondents	Percent
Gender	Male	12	52.2	11	47.8
	Female	79	46.5	91	53.5
Age (group)	>30)years	58	39.2	90	60.8
	(31-40)years	19	76.3	6	24.0
	>41 years	14	70.0	6	10.6
Education	Matriculation passed	4	33.3	8	66.7
	Diploma	15	38.5	24	61.5
	Degree	68	47.9	74	52.1
Service	<10years	44	36.7	76	63.3
	10-20years	26	43.5	20	56.5
	>20 years	21	77.8	6	22.2
School health committee member	Yes	47	55.1	38	44.9
	No	52	50.9	56	49.1
Health training	Yes	45	52.3	41	47.7
	No	46	43.0	61	57.0

Source: Survey Data, 2019

In this study, table (4.22) shows male teachers were more knowledge than female teachers (52.2%, 47.8%).The age of the teachers ranged from 22 to 58 years with mean age of 32.4years. Younger teachers had less knowledge than elder teachers. Older teacher have more experience in their life. In the characteristics of

education, Graduated teachers were higher knowledge level and under graduated were lowest level knowledge in this study. It would be found out the education is influence on health knowledge.

In the background of service, teachers had services above 20 years had got maximum respondents in high level knowledge on Health promoting school activities. Teachers who have services less than 10 years groups were lowest knowledge. It obviously seem higher work experience will get more knowledge. However, it could be seen teachers, who had experienced of school health committee member and attending health related training were higher knowledge than no experienced teachers.

#### **4.3.6 Attitude Level of Primary School Teacher in Health Promoting School Activities**

Among the study population, 193 numbers of teachers are selected. The highest score of attitude was 75, and the lowest score was 25 was given in this study positive score and negative score were divided by mean score. Table (4.23) and Table (4.24) show the relationship between socio-demographic characteristics of primary school teachers and their attitude level.

**Table (4.23) Level of Attitude towards Health Promoting School Activities**

	<b>Level of score</b>	<b>Number of Respondents</b>	<b>Percent</b>
<b>Attitude</b>	Positive	101	52.3%
	Negative	92	47.7%
	Total Score -		75
	Mean -		59.9
	Standard Deviation -		5.5

Source: Survey Data, 2019

Positive attitude score and negative attitude score were divided by mean score. The distribution level of attitude towards health promoting school activities Minimum attitude score is 42 and maximum score is 73. Attitude score of school teachers on health promoting school activities was categorized into positive attitude group (>mean score) and negative attitude group (< mean score). More than half of respondents (52.3%) had positive attitude score and the rest (47.7%).

The following table shows relationship between characteristics of Primary School Teachers and their level of attitude score.

**Table (4.24) Relationship between Characteristics and Attitude**

Background Characteristics		Attitude Level			
		Positive (n=101)		Negative(n=92)	
		Respondents	Percent	Respondents	Percent
Gender	Male	6	26.1	17	73.9
	Female	95	55.9	75	44.1
Age (group)	>30)years	81	54.7	67	45.3
	(31-40)years	10	40.0	15	60.0
	>41 years	10	50.0	10	50.0
Education	Matriculation passed	8	66.7	4	33.3
	Diploma	20	51.3	19	48.7
	Degree	73	51.4	69	48.6
Services	<10years	71	59.2	49	40.8
	10-20years	18	39.1	28	60.9
	>20 years	12	44.4	15	55.6
School health committee member	Yes	49	57.6	36	42.4
	No	52	48.1	56	60.9
Health training	Yes	48	50.5	47	49.5
	No	53	54.1	45	45.9

Source: Survey Data, 2019

In this study, male teachers were poor positive attitude than female teachers. Younger teachers had more positive attitude than elder teachers. In the characteristics of education, Teachers who were matriculation passed had more positive attitude than diploma holding teachers and graduated teachers in this study. In the background of service, teachers had services below 10 years had more positive attitude in Health promoting school activities. It indicated new blood were more positive attitude than old blood, although they were less knowledge than old blood. And then, it could be seen teachers, who had experienced of school health committee member and attending health related training were positive attitude than no experienced teachers.

#### 4.3.7 Practices Level of Primary School Teacher in Health Promoting School Activities

Total practices score of twelve practices questions this study is given 36 points. In this study minimum practices score is 11 and maximum score is 25. Practices score of School teachers on health promoting school activities was categorized into good practices group (> mean score) and poor practices group (< mean score). More than half of respondents (59.1%) had good practices score and the rest (49.9%). Table (4.25) and Table (4.26) show the relationship between socio-demographic characteristic of primary school teachers and their practices level.

**Table (4.25) Level of Practices towards Health Promoting School Activities**

	Level of score	Number of Respondents	Percent
<b>Practices</b>	Good	114	59.1%
	Poor	79	40.9%
	Total Score -		36
	Mean -		19.8
	Standard Deviation -		3.04

Source: Survey Data, 2019

Table (4.25) shows distribution of level of practices among the teachers on Health Promoting School Activities. Total practices score of twelve practices questions this study is given 36 points. In this study minimum practices score is 11 and maximum score is 25. Practices score of School teachers on health promoting school activities was categorized into good practices group (> mean score) and poor practices group (< mean score). More than half of respondents (59.1%) had positive attitude score and the rest (49.9%).

The following table shows distribution of level of practices among the teachers on Health Promoting School Activities.

**Table (4.26) Relationship between Characteristics Teachers and Practices**

Background Characteristics		Practices Level			
		Good(n=114)		Poor(n=79)	
		Respondents	Percent	respondents	Percent
Gender	Male	8	38.4	15	65.2
	Female	106	62.4	64	47.3
Age (group)	>30)years	78	52.7	70	47.3
	(31- 40)years	20	80.0	5	20.0
	>41 years	16	80.0	4	20.0
Education	Matriculatio n passed	5	41.7	7	59.3
	Diploma	14	35.9	25	64.1
	Degree	95	66.9	47	33.1
Services	<10years	64	53.3	56	46.7
	10-20years	30	65.2	16	34.8
	>20 years	20	74.1	7	25.9
School health committee member	Yes	59	69.5	26	30.3
	No	55	50.9	53	49.1
Health training	Yes	52	60.5	34	39.5
	No	62	57.9	45	42.1

Source: Survey Data, 2019

In this study, table (4.26) shows male teachers were poor practices than female teachers in health promoting school activities. Younger teachers had more good practices than elder teachers. . In the characteristics of education, Graduated teachers were good practices level and under graduated were more poor practices level in this study. In the background of service, teachers had the more service the better practices in health promoting school activities. It indicated new blood were more positive attitude than old blood, although they were less knowledge than old blood. And then, it could be seen teachers, who had experienced of school health committee member and attending health related training were good practices than no experienced teachers.

#### 4.3.8 Correlation of Knowledge, Attitude and Practices

The following tables identify the relationship of knowledge, attitude and practices regarding health promoting school activities. Basically, knowledge is the fundamental aspect in these factors. Table (4.27), Table (4.28) and Table (4.29) show the correlation of knowledge, attitude and practices each other.

**Table (4.27) Correlation between Knowledge and Attitude**

		Attitude		<i>p</i> - value
		Negative	Positive	
Knowledge	Low	43.1%	56.9%	0.182
	High	52.7%	43.3%	

Source: Survey Data, 2019

In the correlation between level of knowledge and attitude teachers, the teachers who had high level of knowledge (52.7%) were found to have positive attitude was less than the teachers who had low level of knowledge (56.9%), it was not estimated finding in this study. Most of the teacher had not experienced in medical knowledge because of they did not attend any health related training. But there was not statistically significant association between total knowledge scores and total attitude scores of primary school teachers as shown in Table (4.27).

**Table (4.28) Correlation between Knowledge and Practices**

		Practices		<i>p</i> - value
		Poor	Good	
Knowledge	Low	46.1%	53.9%	0.124
	High	35.2%	64.8%	

Source: Survey Data, 2019

As shown in table (4.28) according to the association between levels of knowledge and practice of teachers, the teachers who had high level of knowledge (64.8%) were found to be better in practice than the teachers who had low level of knowledge (53.9%). It can be assumed that the high knowledge level teacher perform the school health activities more. This association was not statistically significant association between total knowledge scores and total practices scores of primary school teachers. It may be caused because of the monthly report system of school health program, some school teacher has less attitude but they have done these activities according to assessment forms and school health examination sheets.

**Table (4.29) Correlation between Attitude and Practices**

		Practices		<i>p</i> – value
		Poor	Good	
Attitude	Negative	46.7%	53.3%	0.113
	Positive	35.6%	64.4%	

Source: Survey data, 2019

In the association between attitude and level of practice among teachers, the teachers who had positive attitude (64.4%) were found to be better in practice than the teachers who had negative attitude (53.3%) as shown in Table (4.29). It can be assumed that the positive attitude teachers perform the school health activities more. It seems that good attitude cause better performance.



## **CHAPTER V**

### **CONCLUSION**

This study analyzed the knowledge, attitude and practice towards health promoting school activities among primary school teachers in selected primary school at Hmawbi Township area. A survey containing questions on knowledge, attitude and practices of health promoting school activities among primary school teachers was conducted, and descriptive method is used in this study. The active involvement of teachers in school health was vital for success of Health Promoting School Activities. The cross-sectional descriptive study of involvement of primary school teachers on specified school health activities was carried out to find out the active participation of teachers. Knowledge, attitude and practice of teachers were studied to measure the level of involvement of primary school teachers on specified school health activities. The association between level of knowledge, attitude, and practice towards on these activities with level of involvement on school health activities was measured by quantitatively assessment.

#### **5.1 Findings**

According to socio-economic characteristics of respondents, female teacher ratio is obviously greater than male ratio in every school. The age of teachers is between 20 to 58 years with a mean age of 32.04 years. Mostly (73.6%) are graduated and nearly two-third of teachers had service duration is less than 10 years minimum service is 2years and maximum service is 36 years and a mean service of 9.67 years. This study was conducted in post- primary school and primary school, so there were 51 junior assistance teachers included, they were teaching in primary level classes. A few amounts of teachers were participated in school health committee and history of attended health related training course. Thus, mean score of knowledge was lower than medium score, 52.8% of teacher were low knowledge score level in this study.

Regarding level of attitude towards health promoting school Activities Minimum Attitude score is 42 and maximum score is 73. School teachers' attitude

score on was health promoting school activities categorized into positive attitude group (>mean score) and negative attitude group (<mean score). More than half of respondents (52.3%) had positive attitude score and the rest (47.7%).

Total practices score of twelve practices questions this study is given 36 points. In this study minimum practices score is 11 and maximum score is 25. More than half of respondents (59.1%) had good in practices score and the rest (40.9%) had poor.

Between the gender of teachers and total knowledge, attitude and practices score, there was statically significant that female teachers had more positive attitude and better practices score in the of health promoting school activities. Teachers of school committee members and attended health related training were more positive attitude and good practices in health promoting school activities (>50 %).

Regarding components of health promoting school programme, only 23.3% of the teachers mentioned all components correctly more than 90% of teachers knew the first five components but round about 50% of teachers did not know community outreach, social support and training and research are components of HPS programme. It revealed that knowledge on components of HPS activities among primary school teachers was in sufficient and need to enhance. This finding was similar to the study of perception on implementing the health promoting school activities among educational staff in Pakokuu Township, Magway Region, 2017 in which the number of teachers who had low knowledge scores were more than high knowledge scores.

In the level of knowledge of the teachers, most of them (52.8%) were in low level of knowledge (mean 65.4, standard deviation 7.78) in this study. Between 31 to 40 years of aged group teachers and above 20 years services group teachers were found to possess higher knowledge. It was statistically significant between age and level of knowledge of the teachers. It was also statistically significant in the association between service duration and level of knowledge of the teachers. In this study, there was no relation between gender, age, services years and education and knowledge level of teachers on health promoting school activities.

Most of the respondents had positive attitudes towards health promoting activities (94.3%) of teachers agree with performing health promoting school activities get healthy lifestyle from school to community. (98.9%) of teachers accepted they are role model for children in practicing healthy living life-styles.

In this study, it was found that the teachers who had low knowledge of school health had positive attitude than the teachers who had high level of knowledge. In the correlation between knowledge and practice level of teachers, high knowledge teachers were found to be better in practice than the low knowledge teachers. In the correlation between attitude and practice level of teachers, positive attitude teachers were found to be better in practice than the negative attitude teachers. This finding was similar to the study of involvement of primary school teachers on specified school health activities in Danuphu Township.

On the other hand, no significant correlation was found between knowledge and attitude and knowledge and practices of the primary school teachers. Likewise, there was no significant correlation between attitude and practice of the primary school teachers.

## **5.2 Recommendations**

Based on the finding, this study highlighted the knowledge, attitude and practices of primary school teachers on health promoting school activities in Hmawbi Township. Education and Health are excellence investments that each society should make to generate and accelerate a creative and proactive capacity of young people. This will also help in creating a sustainable social, healthy and peaceful human nature. Health of the school children can be ensured if every basic education schools become “Health Promoting Schools.” School teachers are the most suitable resource persons for promoting healthy activities in the school. They are also responsible to inculcate healthy behaviour of the school children. Therefore, well informed and trained school teachers make suitable contribution to health promoting school. School teacher plays under the guidance of School Health Committee has chance of close contact with school children than other committees, so they can promote the Health Promoting School effectively than others. Thus, all teachers need to get experience of school health committee activities, rotating system should be done in selecting school health committee member.

The active participation of teachers in HPS activities as features of key role and it is main point in good achievements of Health Promoting School programme. This study focus on quantitative measurement of already gained knowledge, attitude and practice status of respondent teachers, being determined by structured questions.

The limitation of this study was sampling method used by simple random sampling based on “School” with exclusion criteria for schools having minimal number of teachers. So the sample units may not be completely representative for the target population of teachers in Hmawbi Township.

This study emphasized on the four specific school health activities only (school health education, school environmental sanitation, prevention and control of communicable diseases and nutritional promotion and food safety). Medical examination and dental assessment is examined by township school health committee twice a year. The other school health activities such as school health care, outreach of health, counseling and social support, training and research, and physical exercises and sports were not included. Thus, these should be included in future studies for school health.

The only female gender composed of nearly cent percent (88.1%) in the study sample population. Based on the findings, it is highlighted the fact knowledge level depend on socio-demographic data of school teacher that the level of knowledge of the primary school teachers in this study highlighted the needs for school health promotion activities in the study area. It was found in this study that “ Health is also essential as Education for School Children”, so it is required to establish more effective capacity building by enhancing the training of teachers in both health and education aspects. In this study, the teachers perceived that there was a need to provide health education to their students. However, they perceived themselves as role model of student to promote healthy lifestyle. With regards to the teachers’ attitude towards health education, studies show that teachers who have experienced health promotion training tend to be involved more frequently in health promotion practice and have a more comprehensive approach to HPS programme. Further study with operational research should be performed to determine the importance of participation by the teachers in School Health and to apply the discoveries in capacity building for health promoting school.

According to the results of the correlation between socio-demographic characteristics and knowledge, attitude and practices of respondents, younger teachers have little knowledge, but they are good attitude to perform health promoting school activities. Thus, it should be planned to attend school level school health course and life skill education training course to get more correct health knowledge and good practices.

## REFERENCES

- Al Amari. & Hanna (2013). *An evaluation of the role of elementary school teachers in Kuwait in promoting health.*
- Chavan.G.M., and Chavan,V.M. (2018). *Knowledge, attitude and practices of secondary school teachers regarding school health services in children,* International Journal of Community Medicine and Public Health.
- Cheng, N.Y.I. and Wong, M.Y.E. (2015). Knowledge and Attitude of School Teachers towards Promoting Healthy Lifestyle to Students. Retrieved from *Health, 7, 119-126*
- Felixm, A. S. K. (2008). *School health programme in Manipur of India (2005 -2012).*
- Saraswathy, G. (2007). Report of the National Meeting of the Directors of State Council for Education Research and Training (SCERT) on School Health Promotion (In collaboration with World Health Organization). *National Institute of Health & Family Welfare, New Delhi.*
- Ministry of Information. (2008). *2018 School Health Week, Global New Light of Myanmar*
- Htet Sander Kyaw. (2013). *Assessment on Health Promoting School Activities Among Basic Education High Schools in Taungoo Township, Bago Region.* Thesis, University of Public Health, Yangon (unpublished)
- International Union for Health Promotion and Education. (2008). *Achieving Health Promoting Schools: Guidelines for Promoting Health in Schools,* IUHPE
- Leger, H St. (1999). The Opportunities and Effectiveness of the Health Promoting Primary School in Improving Child Health—a review of the claims and evidence, *health education research vol.14 no.1 1999 theory & practice, 51–69*
- Leger, H St. (2000). Reducing the barriers to the expansion of health promoting schools by focusing on teachers, *Health Education vol 100(2): 81-87*
- Lwanga, S. K., and Lemeshow, S. (1991). *Sample size determination in health studies: A practical manual.* Geneva: WHO.
- Ministry of Education. (2016). *National education Strategic plan (2016-2021)*
- Ministry of Health. (2014). *Health in Myanmar 2014,* Ministry of Health, Naypyitaw, Myanmar

- Ministry of Health (2016). *Health in Myanmar 2016*, Ministry of Health, Naypyitaw, Myanmar
- Ministry of Health. (2008). *Myanmar Global School- Based Student Health Survey*.
- Ministry of Health and Sports. (2016). *Myanmar National Comprehensive School Health Strategic Plan (2017-2022)*. Naypyitaw, Myanmar.
- Ministry of Health and Sports. (2016). *Myanmar National Health Plan (2017-2021)*
- Ministry of Health and Sports. (2016). *2016 Myanmar School-Based student Health Survey*, Myanmar National Comprehensive School Health.
- Ministry of Health and Sports. (2017). *Public Health Statistics Report (2014-2016)* Naypyitaw, Myanmar
- Ministry of Health. (2005). *School health and Youth Health School Health Manual 2005*, Yangon, Myanmar.
- Ministry of Health and Sport. (2018). *School Health Manual 2018*. Department of Public Health, Naypyitaw, Myanmar.
- Ministry of Health and Sport. (2018). *Standardized Health Messages Book*.Version-01
- Ministry of Health and Sport. (2018). *Training Package for Health Promoting Schools (2018)*, Retrieved from Department of Public Health, Naypyitaw, Myanmar.
- Ministry of Immigration and Population. (2015). *The Myanmar Population and Housing Census, The Union Report Volume 2*, Department of Population, MOIP
- Myo Min. (2009). *Role of Teachers in Health Promoting School Activities in Taunggyi Township, Shan State, Myanmar*. MPH Thesis, University of Public Health, Yangon.
- Odeyemi K.A. & Chukwu E.E. (2015) *Knowledge, Attitude, and Practice of School Health among Primary School Teachers in Ogun State, Nigeria*. DOI:
- Ratnaprabha GK, Kumar A and Kumar A. (2018). *Practices regarding personal hygiene among government high school students of a rural area in Central Karnataka*. Int J Med Sci Public Health 2018;7 (6):457-461.
- School Boards' Co-Operative Inc. (2018). *Teachers' H&S Role and Responsibilities, School Boards' Co-Operative Inc Health and Safety Bullitin*
- Shwe Sin Htike. ( 2017). *Perception and Participation on implementing the Health Promoting school activities among Educational staff in Pakokku Township*,

- Magway Region. MPH Thesis University of Public Health, Yangon (unpublished)*
- Suu Nwe Soe. (2012). *A Study on Health Knowledge and Practices among Primary School Children in Yangon*, EMPA Thesis Yangon University of Economics (unpublished)
- UNICEF. (2013). *Improving Learning environment for Primary School Children in Myanmar*.
- Win Naing. (2018). *Role of Teachers in School Health in Mingaladon Township Yangon Division*, Master of Medical Science ( Public Health ) Thesis Defence Services Medical Academy (unpublished)
- World Health Organization. (2003). *A Guide for Establishing Health Promoting Healthy*, World Health Organization, Geneva.
- World Health Organization. (1995). *Global School Health Initiative*. Geneva.
- World Health Organization. (2008). *Global School Health Initiative*. Geneva.
- World Health Organization. (2013). *Global Standard for Health Promoting Schools*
- World Health Organization. (2012). *Health Promoting School Framework for Improving the Health and Wellbeing of Students*. Geneva.
- World Health Organization. (1986). *Ottawa Charter for Health Promotion*
- World Health Organization. (1978). *Report of the International Conference on Primary Health Care*, Alma-Ata USSR. Geneva: WHO;
- World Health Organization (2008). *School Health Promotion, Report of Inter-Country Workshop*, Bangkok.
- World Health Organization. (2016). *Shanghai Declaration on promoting health in the 2030 Agenda for Sustainable Development Achieving Health Promoting School, Guidelines for Promoting Health in School*
- World Health Organization. (2016) *Teachers' Handbook for Inclusive in School Health and Nutrition (2017-2018)*. School Health Integrated Programme
- World Health Organization. (2006). *The Evidence on School Health Promotion in Improving Health of Preventing Diseases and Specifically World Health Organization*
- World Health Organization. (1996). *Regional guidelines: development of health promoting school-a frame work for action series 5*.

Ye Minn Htun, Kay Thi Lwin, New Nwe Oo, Kyaw Soe & Than Tun Sein. (2012).  
*Involvement of primary school teachers on specified school health activities in  
Danuphyu township, Ayeyarwaddy Region, Myanmar.*



## WEBSITES

1. <http://dx.doi.org/10.4236/health.2015.71014/>
2. <http://dx.doi.org/10.4314/njpv42i4.11>
3. [http://www.ijcmph.com5\(4\):1541-1546](http://www.ijcmph.com5(4):1541-1546)
4. <http://www.iuhpe.org/index.html>
5. [http://www.iuhpe.org/index.html?page=516&lang=en#sh\\_guidelines.](http://www.iuhpe.org/index.html?page=516&lang=en#sh_guidelines)
6. <http://www.mohs.global-school-based-students-health>
7. <http://www.unicef.org.myanmar/media-20729.htmlretrfived>
8. [http://www.who.int/healthpromotion/conferences/9gchp/shanghai  
declaration/en/](http://www.who.int/healthpromotion/conferences/9gchp/shanghai-declaration/en/)
9. <http://www.who.int/healthpromotion/conferences/previous/ottawa/en/>
10. [http://www.who.int/school\\_youth\\_health/gshi/en/](http://www.who.int/school_youth_health/gshi/en/)
11. [http:// www.iris.wpro.who.int.](http://www.iris.wpro.who.int)
12. [https://doi.org/10.1080/14635240.2007.10708117.](https://doi.org/10.1080/14635240.2007.10708117)
13. <https://www.globalpartnership.org>

## APPENDIX

### Appendix (a)

#### Assessment for “A Study on Knowledge, Attitude and Practices of primary school teachers towards Health Promoting School activities”

##### Socio-Economics Characteristics Data

- (1) Male /Female -----
- (2) Age -----
- (3) Education
- ( ) Matriculation passed
  - ( ) Diploma
  - ( ) Degree
  - ( ) Post Graduated
  - ( ) Master
- (4) Rank
- ( ) Primary assistance teacher
  - ( ) Junior assistance teacher
  - ( ) Senior assistance teacher
- (5) Services -----
- (6) Former School health committee member (Yes)/(No)
- (7) Attended School Health Related Training Course (Yes)/(No)
- If Yes -----
- Attended Refresher Course (Yes)/(No)
  - School Level school health training course (Yes)/(No)
  - Township Level school health training course (Yes)/(No)
  - Life Skill Education Training (Yes)/(No)
  - First Aid Training Course/Red Cross Training Course (Yes)/(No)

**Appendix (b)****Assessment for Knowledge level questionnaire for health promoting school Activities**

No.	Items	Yes	No	Don't know
1.	The Components of HPS activities are-			
	(1)School health education			
	(2)School environmental sanitation			
	(3)School-based disease control			
	(4)Nutrition promotion and food safety			
	(5)Medical examination including primary oral care and dental examination			
	(6)Community outreach			
	(7)Counselling and social support			
	(8)Training and research			
	(9)Sports and physical activity			
2.	Main health Education Topics for Primary Level are-			
	(1)Personal hygiene			
	(2)Vactora of communicable diswase			
	(3)Proper waste Disposal			
	(4)Oral hygiene and dental care			
	(5)Road traffic education			
3.	The aims of school environmental sanitation are-			
	(1)To practice systematically dispose excreta			
	(2)To protect injury and accidents			
	(3)To perform personal hygiene students themselves			
	(4)To provide mosquito free school			
	(5)To prevent disasters			
4.	Communicable Diseases in school that transmit among students are			
	(1) Dengue Hemorrhagic Fever			
	(2) Tuberculosis			
	(3) Diarrhea			
	(4) Food poisoning			
	(5) Meningitis			
5.	Basic Health Assessment are			
	(1) Physical Growth			
	(2) Incidence of Seasonal Disease			
	(3) Vitamin Deficiency			
	(4) Skin Infection			
	(5) Personal hygiene			
6.	Examination Point of Personal Hygiene are-			
	(1) Daily tooth brushing			
	(2) Daily combing			
	(3) Weekly nail cutting			
	(4) Cleanliness of clothing			
	(5) Hand washing			

No.	Items	Yes	No	Don't know
7.	Disease Prevented by Hand Washing Practices are-			
	(1) Warm Infestations			
	(2) Diarrhoea			
	(3) Conjunctivitis			
	(4) Influenza			
	(5) Skin Infections			
8.	Disease Transmitted by Mosquitoes Bite are-			
	(1) Japanese Encephalitis			
	(2) Dengue Hemorrhagic Fever			
	(3) Filarial elephantiasis			
	(4) Malaria			
	(5) Worm infestation			
9.	Nutrition and Food Safety Programme are-			
	(1) Selling readymade snacks at school food count			
	(2) School lunch box practices			
	(3) Teaching planting practice among school children			
	(4) Donating method			
	(5) Parent-Teacher Association method			
10.	Check Points of School Canteen are			
	(1) Sellers are free from communicable disease			
	(2) Keeping dust-ban with lid			
	(3) Selling Food must be clean and nourished			
11.	Preventing of school children from mosquitoes bite are-			
	(1) Covered well and pots			
	(2) Instruct students to wear long sleeves			
	(3) Provide good ventilation and lighting			
	(4) Burning mosquitoes coils			
	(5) Landfilling the stagnant water			
12.	Types of Sanitary Disposed Methods are-			
	(1) Buried			
	(2) Composting			
	(3) Dumping			
	(4) Discard into the river or stream			
	(5) Municipal collecting			
	(6) Burning			
13.	Check Points of School Latrine are-			
	(1) Odorless			
	(2) Enough water supply			
	(3) Keeping soap and towel			
	(4) Flies-free			

## Assessment for Attitude Level Questionnaire for Health Promoting School

### Activities

No.	Items	Strongly agreed	Agreed	Neutral	Dis-agreed	Strongly Dis-agreed
1.	Parents should be involved in health education talks					
2.	Examining of personal hygiene of children will be performed by school teachers					
3.	Parent participation is needed, in formulating school lunch box program.					
4.	Health promotion school activities should perform by medical person					
5.	Teachers should be attend to health related training (first aid, traditional medicine)					
6.	Performing health promoting school activities get healthy lifestyle from school to community					
7.	Discarding waste outside the school compound will become waste free school					
8.	Health promotion school activities can get healthy living life-style for students					
9.	School teachers are role model for children in practicing healthy living life-styles					
10.	Selling student preferred foods in the canteen that would be nourish					
11.	Tooth brushing after lunch practice programme of primary school children is needed.					
12.	In primary school, these should be one latrine enough for 70 students					
13.	For students, education is more important than health.					
14.	Health education is the one of the way of acute communicable disease prevention.					
15.	Sports, physical exercises and social activities are not support for higher intelligence of children					

## Assessment for Practice Level of Teachers in Health Promoting School activities

1. How many times do you take the health education for personal hygiene?
  - Daily
  - Weekly
  - Monthly
  - Not done
  
2. How many times did you checked students have done personal hygiene?
  - Daily
  - Weekly
  - Monthly
  - Not done
  
3. Which time did you check the outdoor sanitation of school?
  - Daily
  - Weekly
  - Monthly
  - Not done
  
4. How many times did you check the class room sanitation of school?
  - Daily
  - Weekly
  - Monthly
  - Not done
  
5. How many times did you check cleaning of drinking water/ water pot with lid and cup?
  - Daily
  - Weekly
  - Monthly
  - Not done
  
6. How many time do you check school latrine?
  - Daily
  - Weekly
  - Monthly
  - Not done
  
7. Did you check students have been disposing garbage at recommend place ?
  - Daily
  - Weekly
  - Monthly
  - Not done

8. Did you participate in insecticide spraying for fly or mosquito in your school?

- Done
- Not Done

9. How any time do you participate in school nutritional programme?

- Weekly
- Bi-Weekly
- Monthly
- Two-Monthly
- Three- Monthly
- Not done

10. How any time do you perform measuring high and weight of students?

- Monthly
- Three- Monthly
- Six-Monthly
- Not done

11. Do you check the food stall at canteen that are well nourish?

- Daily
- Weekly
- Monthly
- Not done

12. Do you initiate students to practice of collecting waste to formulate waste free school?

- Daily
- Weekly
- Monthly
- Not done

Appendix (c)

Total Mean Scores of Practices Level of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 11.00	2	1.0	1.0	1.0
12.00	4	2.1	2.1	3.1
13.00	4	2.1	2.1	5.2
14.00	2	1.0	1.0	6.2
15.00	8	4.1	4.1	10.4
16.00	5	2.6	2.6	13.0
17.00	10	5.2	5.2	18.1
18.00	14	7.3	7.3	25.4
19.00	30	15.5	15.5	40.9
20.00	33	17.1	17.1	58.0
21.00	21	10.9	10.9	68.9
22.00	24	12.4	12.4	81.3
23.00	16	8.3	8.3	89.6
24.00	14	7.3	7.3	96.9
25.00	6	3.1	3.1	100.0
Total	193	100.0	100.0	



### Total Mean Scores of Attitude Level of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 42.00	2	1.0	1.0	1.0
43.00	2	1.0	1.0	2.1
48.00	2	1.0	1.0	3.1
50.00	2	1.0	1.0	4.1
51.00	2	1.0	1.0	5.2
52.00	4	2.1	2.1	7.3
53.00	2	1.0	1.0	8.3
54.00	10	5.2	5.2	13.5
55.00	9	4.7	4.7	18.1
56.00	17	8.8	8.8	26.9
57.00	9	4.7	4.7	31.6
58.00	18	9.3	9.3	40.9
59.00	13	6.7	6.7	47.7
60.00	10	5.2	5.2	52.8
61.00	15	7.8	7.8	60.6
62.00	10	5.2	5.2	65.8
63.00	10	5.2	5.2	71.0
64.00	12	6.2	6.2	77.2
65.00	19	9.8	9.8	87.0
66.00	8	4.1	4.1	91.2
67.00	7	3.6	3.6	94.8
68.00	2	1.0	1.0	95.9
70.00	4	2.1	2.1	97.9
71.00	2	1.0	1.0	99.0
73.00	2	1.0	1.0	100.0
Total	193	100.0	100.0	

### Total Mean Scores of Knowledge Level of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 45.00	2	1.0	1.0	1.0
46.00	2	1.0	1.0	2.1
53.00	2	1.0	1.0	3.1
54.00	1	.5	.5	3.6
55.00	5	2.6	2.6	6.2
56.00	4	2.1	2.1	8.3
58.00	8	4.1	4.1	12.4
59.00	9	4.7	4.7	17.1
60.00	18	9.3	9.3	26.4
61.00	17	8.8	8.8	35.2
62.00	10	5.2	5.2	40.4
63.00	2	1.0	1.0	41.5
64.00	7	3.6	3.6	45.1
65.00	15	7.8	7.8	52.8
66.00	14	7.3	7.3	60.1
67.00	15	7.8	7.8	67.9
68.00	14	7.3	7.3	75.1
69.00	2	1.0	1.0	76.2
70.00	11	5.7	5.7	81.9
71.00	8	4.1	4.1	86.0
72.00	4	2.1	2.1	88.1
73.00	2	1.0	1.0	89.1
75.00	2	1.0	1.0	90.2
76.00	6	3.1	3.1	93.3
78.00	2	1.0	1.0	94.3
82.00	2	1.0	1.0	95.3
83.00	2	1.0	1.0	96.4
84.00	2	1.0	1.0	97.4
89.00	2	1.0	1.0	98.4
90.00	3	1.6	1.6	100.0
Total	193	100.0	100.0	