

**THE CHALLENGES FACING PRIMARY SCHOOL TEACHERS
IN TEACHING HEALTH EDUCATION IN TEMEKE
MUNICIPALITY DAR ES SALAAM TANZANIA**

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**MPH (Master of Public Health) Dissertation
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By

Niwabigira Wilhelmina Rugaimukamu

**A Dissertation Submitted in (partial) Fulfillment of the Requirements for
the degree of Master of Public Health of
Muhimbili University of Health and Allied Sciences**

**Muhimbili University of Health and Allied Sciences
November 2014**

CERTIFICATION

The undersigned certifies that has read and hereby recommends for acceptance by the Muhimbili University of Health and Allied Sciences a dissertation entitled *'The challenges facing primary school teachers in teaching health education in Temeke Municipality, Dar es Salaam, Tanzania'* in (partial) fulfillment of the requirements for the degree of Master of Public Health of Muhimbili University of Health and Allied Sciences.

Prof. Melkizedek Leshabari
(Supervisor)

Date:

DECLARATION

AND

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I, **Niwabigira Wilhelmina Rugaimukamu**, declare that this **dissertation** is my original work and that it has not been presented and will not be presented to any other university for a similar or any other degree award.

Signature:

Date:

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DEDICATION

This dissertation is dedicated to my beloved husband, Mr. Audax Rwechungura and our lovely children Derick, Paschasia, Evodius, Edwin and Lillian.

ABSTRACT

Background

The provision health education is important in achieving quality health education and assisting children to build their future status. Teaching of health education in Temeke Municipality has not been effectively provided due to mainly challenges affecting the teachers. The competency of teachers teaching science or health education in Temeke Municipality primary schools and the competency influencing factors such as teachers' background knowledge in health education and the criteria used to assign teachers to teach science subjects was not well known. Further the primary schools health sanitation status was not well known.

Main Objective

The main objective of this study was to identify challenges faced by teachers who teach health education in primary schools in Temeke Municipality, Dar es Salaam.

Method

A cross-sectional descriptive study using both qualitative and quantitative approaches was used to generate data for this study. Semi structured questionnaires were administered to 265 science subject teachers in selected primary schools. Multi-stage sampling was used to get the study sample. First, two divisions out of the three divisions in the municipality were selected. Then one ward was picked from each of the selected divisions. All primary schools within the selected wards were included in the study. Finally, all science subject teachers from the selected schools were recruited as study participants.

Observation method was used to assess the hygienic status of the school toilets.

Results

The result shows that almost a third of the science teachers never received health education training before they started teaching in primary schools; few had been exposed to in-service training.

More than three quarters (76.6%) of the study participants were assigned by school authority to teach the subject based mainly on their pre-service background knowledge from the teachers' training institutes. More than half (55%) of the pupils' toilets were dirty in comparison with less than half (45 %) of the teachers' toilets.

Though health education teaching guidelines were in place, the quality of health education was, in most schools found to be highly challenged by limited resources, high number of pupils to available few teachers and facilities and limited knowledge of teachers to teach health education.

Conclusion

The study concluded that limited of resources and lack of adequate competence of teachers was the main cause leading to ineffective provision of health education in Temeke Municipality primary schools. Most teachers had received inadequate in-service training and in-service development on health education.

Recommendations

It is recommended to improve the pre-service and in-service training system in Tanzania. As well as to define the criteria and the authority for appointing teachers, by providing required resources for teaching health education in primary schools.

TABLE OF CONTENTS

CERTIFICATIO.....	i
DECLARATION AND COPYRIGHT.....	ii
ACKNOWLEDGEMENT.....	iii
DEDICATION.....	iv
ABSTRACT.....	v
TABLE OF CONTENTS.....	vii
LIST OF TABLES.....	x
LIST OF FIGURES.....	xi
LIST OF ABBREVIATIONS.....	xii
OPERATIONAL DEFINITIONS.....	xiii
CHAPTER ONE.....	1
INTRODUCTION.....	1
1.0 Background to the Research Problem.....	1
1.2 Statement of the Problem.....	3
1.3 Rationale of the study.....	5
1.4 Objectives.....	5
1.4.1 Main Objective.....	5
1.4.2 Specific Objectives.....	5
1.5 Research Questions.....	6
1.6 Conceptual Framework.....	6
CHAPTER TWO.....	9
2.0 LITERATURE REVIEW.....	9
CHAPTER THREE.....	20
3.0 RESEARCH METHODOLOGY.....	20
3.1 Introduction.....	20
3.2 Study Area.....	20
3.3 Study Design.....	20

3.4 Study Population.....	20
3.5 Sample Size.....	20
3.6 Sampling Technique.....	21
3.7 Data Collection Procedures.....	21
3.8 Data Collection Methods.....	21
3.8.1 Structured Questionnaire.....	22
3.9 Data processing, analysis and presentation.....	25
3.10 Ethical Considerations.....	25
3.11 Limitations.....	25
CHAPTER FOUR.....	26
4.0 Results.....	26
4.1 Introduction.....	26
4.2 Socio-Demographic Characteristics of the Study Population.....	26
4.3 Proportion of teachers with Health Education Background.....	27
4.4 Criteria Used to Assign Teachers to Teach Health Education.....	28
4.5. Teaching of Health Education in School.....	29
4.6: Challenges teachers faced when teaching health education.....	36
CHAPTER FIVE.....	38
5.0 Discussion.....	38
CHAPTER SIX.....	40
6.0 CONCLUSION AND RECOMMENDATIONS.....	40
6.1. Conclusion.....	40
6.2 Recommendations.....	41
REFERENCES.....	43
APPENDICES.....	47
APPENDIX 1: INFORMED CONSENT FORM ENGLISH VERSION.....	47
APPENDIX II: QUESTIONNAIRE FOR (ENGLISH VERSION).....	49
APPENDIX III: INFORMED CONSENT FORM SWAHILI VERSION.....	50
APPENDIX IV:.....	53

APPENDIX V- QUESTIONNAIRE FOR (KISWAHILI VERSION).....	65
SECTION3. 2 A: PUPILS TOILETS OBSREVATION.....	74
APPENDIX VII: SECTION 3.2 B : TEACHERS TOILETS OBSREVATION	
SECTION3:.....	76
APPENDIX VIII: OBSERVATION OF DATA (KISWAHILI VERSION).....	78
APPENDIX IX: SEHEMU: 3.2 B, UCHUNGUZI WA VYOO VYA WALIMU.....	82

LIST OF TABLES

Table 1: Indicators used to assess the cleanliness of the school toilets.	22
Table 2: Socio-Demographic Characteristics of the Study Population.....	27
Table 3: The Criteria Used to Assign Teachers to Teach Health Education (HE)	29
Table 4: Scores Variations in Assessing Cleanliness of Pupils' Toilets.....	32
Table 5: Teachers' Toilets Cleanliness Status	34
Table 6: Scores of the Teachers' Toilets on Criteria Used to Assess the cleanliness	34
Table 7: Cross tabulation showing relationship between Hygiene Status of the Pupils' Toilets and Some Explanatory Variables	36

LIST OF FIGURES

FIGURE 1: CONCEPTUAL FRAMEWORK	8
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LIST OF ABBREVIATIONS

AIDS	Acquire Imuno-Deficiency Syndrome
DANIDA	Danish International Development Agency
DSM	Dar es Salaam
DUCE	Dar es Salaam University College of Education
EFA	Education for All
ESDP	Education Sector Development Programme
FRESH	Focusing Resources for Effective School Health
HE	Health Education
HIV	Human Immunodeficiency Virus
JICA	Japanese International Cooperation Agency
LEHEP	Lesotho Enhanced Health Education Project
MPH	Master of Public Health
MUHAS	Muhimbili University of Health and Allied Sciences
MOEVT	Ministry of Education and Vocational Training
MOEU	Ministry of Education Uganda
MOES	Ministry of Education Singapore
MOEZ	Ministry of Education Zambia
MoH	Ministry of Health Tanzania
NGO	Non-Governmental Organization
PEDP	Primary Education Development Programme
PHC	Primary Health Care
SPSS	Statistical Package for Social Sciences
TPR	Teacher-Pupil Ratio
TZS	Tanzanian Shillings
URT	United Republic of Tanzania
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WASH	Water Sanitation and Hygiene Education
WHO	World Health Organization
WB	World Bank

OPERATIONAL DEFINITIONS

Primary Education: Primary education in this study is the formal compulsory education provided to children starting at age seven that continues for seven years. In public schools it is however common for children to stay in primary school for a longer period of time. In Tanzania, public primary school education is the first stage of compulsory education. In most public / Government primary school education is taught in Kiswahili language while a number of private primary schools teach in English language (UNESCO, 2000; UNESCO/UNICEF/WHO, 2000; WHO, 1978)

Health education is a social science that originated from the biological, environmental, psychological, physical, and medical sciences. Health education aims to provide health knowledge to especially children in their tender age in order to make quality health decisions and control own lives while they become adult. (UNESCO,2000;UNESCO/UNICEF/WHO,2000;WHO,1999;Mosha 1995).

CHAPTER ONE

INTRODUCTION

This chapter explains the background to the problem, problem statement, research question, objective and rationale of the study.

1.0 Background to the Research Problem

Effective Health Education is a vital component in assisting children to develop their values, attitudes and skills and enable them in future to participate fully in the society and take control of their own health throughout all human being development stage and the teachers has a big role in providing effective health education teaching in primary schools (UNESCO, 2000).

The numbers of strategies, varying in quality from country to country have been put in place in order to improve the provision of health education in primary schools. Some countries have provided pre-service training and/or in-service development programmes in order to address the challenges of the teachers. Such initiatives have shown different levels of achieving quality health education as well as challenges (Moshia, 1995; ESDP, 2009).

In some programmes it was noted that the level of knowledge and skills of teachers depended on a number of factors, including the way the teachers have been empowered by the educational system (PEDP, 2006). The provision of teaching skills through in-service training and workshops was found to significantly facilitate improvement in the type of knowledge and skills which the teachers needed for

effective teaching of health education in classrooms (ESDP, 2009; WHO, 1978). Furthermore, as the case for Uganda curriculum, health education was integrated in to basic sciences with 60% focusing on science issues and 40%, focused on specific health education issues in primary schools while HIV/AIDS education had been integrated into education programme as one of the area of specialisation in for primary school teachers training colleges (Miguel, et al., 2004; Williams, 2000).

Other studies have shown that, the quality of health education depended on various aspects, including having well trained teachers, supportive learning environment with adequate facilities and learning materials (Mosha, 1995; Lockheed, 1991).

Further, the provision of health education policy framework guidelines and clear pre-service training and in-service development programmes for teachers have shown to play a significant role in improvement of teachers training capacities (Temeke Municipality, 2012).

The Ministry of Education and Vocational Training in Tanzania through the Primary Education Development Programme (PEDP I) and now the PEDP II (2007-2011) is committed to ensuring provision of effective school health education in order to improve the quality of education to all. The PEDP I has recorded increased expansion of schools, classrooms and Improved Primary School Gross and Net Enrolment Ratio (ESDP, 2009; PEDP, 2006).

However developing countries have found out that implementation of these strategies have encountered a number of challenges ranging from weak policy, technical, poor infrastructure support and weak implementation (Lookheed, 1991).

Developing countries generally identified resources constraints in upgrading health education knowledge and skills of primary school teachers (PEDP, 2006; Becky et.al. 2005). The Ministry of Education and Vocational Training (MoEVT) noted policy challenges. MoEVT also noted difficulties in implementing the current primary school syllabus, and the over-loaded curriculum and also encountered financial, human and infrastructural as major constraints in upgrading health education knowledge and skills of primary school teachers. PEDP I identified

shortage of enough and qualified teachers to effectively manage the quality teaching and learning in classroom (ESDP, 2009; PEDP, 2006; Becky et, al. 2005).

Other studies done in Tanzania noted challenges related to the teachers. They noted that teachers' performance was related to the training they had received before starting teaching and in service during the teaching career PEDP, 2006; Becky et,al.2005).

Provision of effective health education in Temeke Municipal primary schools was faced also with organizational, professional and environmental related factors (Rogan & Grayson, 2003).

1.2 Statement of the Problem

Effective health education teaching in primary schools is important in achieving quality education and assisting children to build their future health status. The external environment and internal environment factors have influenced and determined the provision of quality health education. The teachers have been identified to be among the main factors determining the quality of health education provided in primary schools around the world (UNESCO/UNICEF/WHO, 2000).

Most schools in developing countries do not effectively teach the importance of personal hygiene, good nutrition and school feeding as well as access to clean water for health(UNESCO,2000;UNESCO/UNICEF/WHO,2000;PEDP,2006).

One study from Tanzania revealed that health education is not well practiced in most primary schools despite the existence of an education policy directive insisting that various health topics should be taught in science syllabus (Masha,1995;ESDP,2009;PEDP,2006).

Various countries, including Tanzania have put in place various strategies and /or programme in order to improve the provision of quality health education in primary schools.

Globally, some countries have provided pre-service training and/or in-service development programmes in order to address the challenges of the teachers. Such initiatives have shown different levels of achievements as well as challenges (Moshia, 1995; ESDP, 2009).

However, the implementation of these strategies has encountered various challenges, including challenges facing teachers. Among these challenges there have been low level of teacher's confidence and lack of competence in relation to scientific pedagogical content knowledge on health education issues. Other challenges have been lack of sufficient resources, time constraints and lack of professional development support for in services teachers (UNESCO/UNICEF/WHO, 2000; Moshia, 1995).

In Tanzania, improving the quality of education in Tanzania and many other countries in Africa has been considered as fundamental goal towards universal primary education. To attain quality education stakeholders have recognized that many factors are required (ESDP, 2009; PEDP, 2006; ESDP, 2000).

Tanzania has put policy and various programmes related to health education in schools. The performance of such programmes has been mixed – with success in certain aspects and failure in others. For example the practice of health education programmes has not been successful due to different factors. The most prominent factors have included low quality of the teachers providing health educational, lack of instructional materials like textbooks, pamphlets, posters, health infrastructural facilities such as play fields, time available for instruction is limited including lack of family involvement and community participation in matters associated to health education (MOEVT ,2005;WHO,1978).

In Temeke Municipality primary schools, teaching of health education has not been effectively provided due to a number of reasons including. The proportion of primary school teachers with training background in health education and the extent to which health education teachers have been exposed to health education teaching content is unknown. Apart from that the capacity of teachers teaching science or health education in Temeke Municipal primary schools was not well understood.

Furthermore, the criteria used to assign teachers to teach science subjects and school health sanitation status in primary schools in Temeke Municipal was not well understood. The extent to what was taught in health education sub topics reflected the school environment (e.g. availability of clean toilets & water for washing hands) in most schools was also not known. Further, there is not enough evidence which indicates that most schools are equipped with basic health facilities. Such basic health facilities included availability of clean and safe water, sufficient sanitary facilities, adequate waste collection and disposal to promote health. Also there was not enough evidence on the challenges faced by teachers when teaching health education.

1.3 Rationale of the study.

The findings of the study would inform on barriers to effective provision of health education in primary schools. Such knowledge would help the education planners and other related stakeholders to design the right intervention to mitigate the problem. This would in turn create good friendly environment for the teachers and pupils to provide quality health education.

1.4 Objectives

1.4.1 Main Objective

The main objective of this study was to identify the challenges faced by teachers who teach health education in primary schools in Temeke Municipal Dar es Salaam

1.4.2 Specific Objectives

This study specifically intended to:

- i. Identify the proportion of primary school teachers with training background in health education.

- ii. Determine the criteria used to assign teachers to teach health education in primary schools
- iii. Explore the extent to which the school environment reflects what is taught in health education.
- iv. Identify the challenges faced by teachers when teaching health education.

1.5 Research Questions

The study was guided by the following questions

- i. What proportion of primary school teachers had background or knowledge in what they teach in health education?
- ii. What criteria at school level are used to assign teachers to teach health education?
- iii. To what extent does the hygiene of school toilets reflect what is expected to be taught in health education?
- iv. What are the challenges faced by teachers in teaching health education?

1.6 Conceptual Framework

The quality of health education and health promotion may be affected by the organization, professional and environmental factors. Teaching skills on health education can be acquired primarily from colleges or from various health seminars organized by the school administration. In most teachers' training colleges in Tanzania, health education was not given priority. Therefore students acquire low knowledge and skills on health education lessons while they were expected to teach such knowledge in the primary school after they graduate (PEDP, 2006).

The complexities of school syllabus reduced the teaching morale for teachers to teach and cover the school syllabus at a given time. On the other hand, teachers lacked strategies and skills of teaching health subjects. As the result, the teachers were unable to teach the pupils effectively and the pupils got limited knowledge and skills about health education (MoEVT, 2005). In addition the environment in and around schools, for example the availability of water for hygiene and sanitation and

status of toilets to prevent communicable diseases was inadequate (WHO, 1978; Temeke Municipality, 2012).

Many primary schools teachers were unable to acquire health education skills while at college and consequently could not deliver basic health education skills and practice to the pupils (MoES, 2001). When at work, the teachers found limited development in health education and health related issues or topics, which hinder the teachers to acquire requisite knowledge and deliver health skills to pupils. Lastly, lack of interest to adapt new teaching skills on good health practice and lack of teaching supervision including support had led to poor performance of the teachers (UNESCO, 1992).

CONCEPTUAL FRAMEWORK

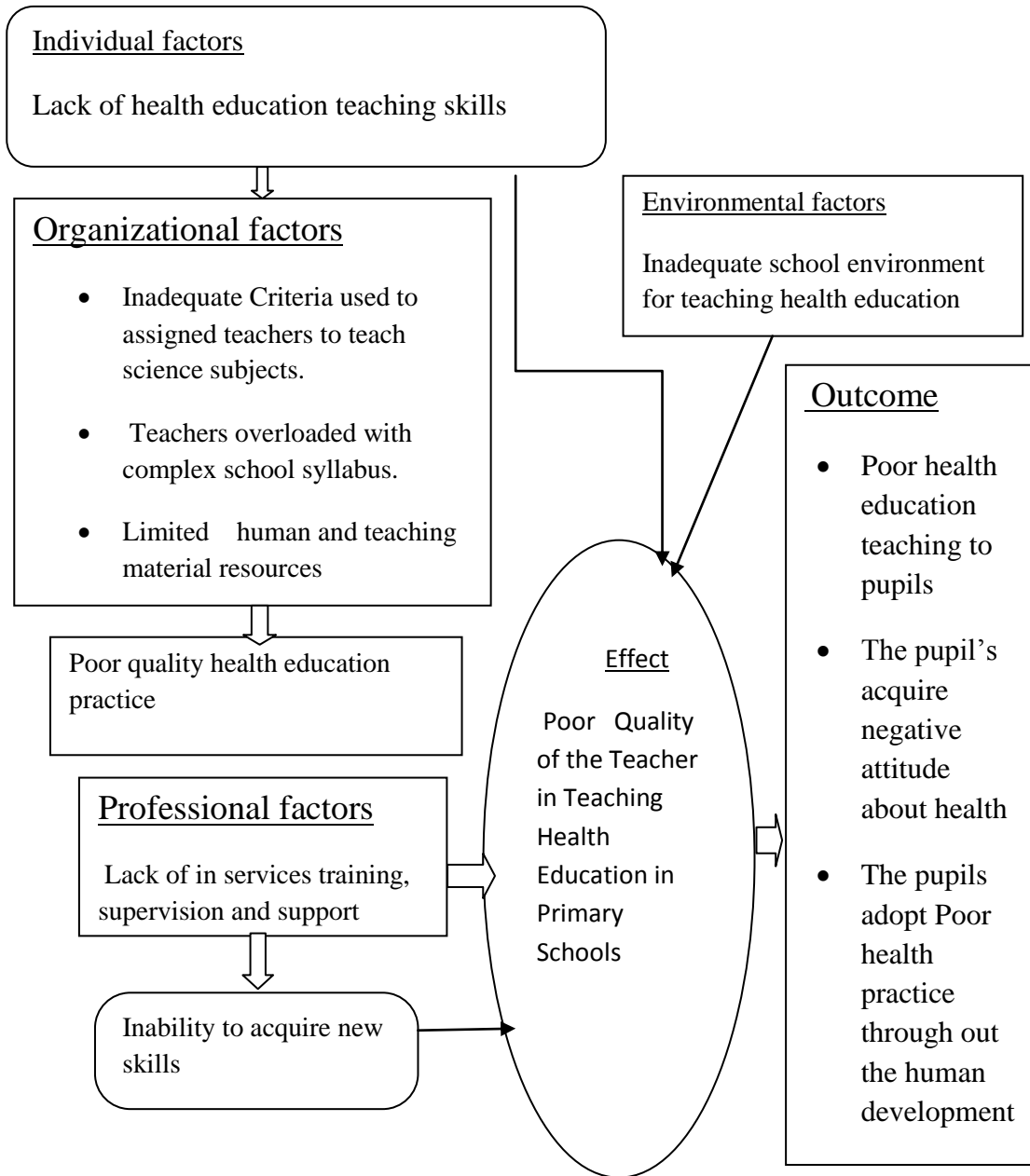


Figure 1: **Conceptual framework for challenges facing primary school teachers on provision of health education.**

CHAPTER TWO

2.0 LITERATURE REVIEW

Health Education aims to provide knowledge and skills to empower pupils to live healthy lifestyles, take responsibility for their health well-being of others and the environment. It also aims to provide pupils with the opportunities to develop habits towards good health practice and good attitudes (UNESCO, 2000).

Health education teacher teach about physical, mental, emotional and social health (UNESCO, 2000; UNESCO/UNICEF/WHO, 2000).The study shown that Health education curricula in school and instruction help students to learn skills they will use to make healthy choices throughout their lifetime. Effective curricula result in positive changes in behavior that lower student risks around physical activity, prevention of diseases and family life. In general, healthy students learn better (Mosha, 1995).

At the beginning of the Millennium development goals, the Dakar Framework for Action stressed the need for all children to have quality education. Quality education was described as the education that will meet the basic learning needs in the best and fullest sense of the term, an education that includes learning to know, to do, to live together and to be able to adapt good health practice (UNESCO, 2000). .

Teachers have been considered to play the critical role of improving the quality of education by the special Inter-Governmental Conference convened jointly by UNESCO and ILO in Paris in 1966 emphasized interdependence between the status of teachers and the status of education. Since then the critical role of teachers in improving the quality of education has been recognised in most educational reforms worldwide (UNESCO,UNICEF/WHO.2000).

Numerous studies have shown that schools with health education practice had healthier students who tend to do better in school. They have higher attendance, have better grades and perform better on tests (ESDP, 2009). Also the school is considered to be a very important area for health education among children and

pupils. However, in many developing countries the practice for health education is not well achieved. The Millennium Development Goals stress the need for all children to have quality education. UNESCO describes quality education as the education that meets the basic learning needs which includes learning to know, to do, to live together and to be able to adapt good health practice (UNESCO,2000; PEDP,2006).

Health Education aims to provide knowledge and skills to empower pupils to live healthy lifestyles, take responsibility for their health well-being of others and the environment. It motivates students to improve and maintain their health, prevent disease and reduce risky behaviors (UNESCO, 2000; Moshia, 1995; ESDP, 2009).

Teachers have been considered to play the critical role of improving the quality of education since then the critical role of teachers in improving the quality of education has been recognised in most educational reforms worldwide (UNESCO/UNICEF,WHO;2000;PEDP,2006).

The professional capacity and competences of school teachers was linked to the quality of the pre-service training provided to the teachers before beginning their work in the classroom (Moshia, 1995; ESDP, 2009).

Several studies done in various countries indicated that teachers ability to teach health education it depend the way teachers had been empowered by school education authorities and supervisors, human resources and teaching material resources available; management knowledge, skills on health issues of the Head Teacher and the school culture (PEDP,2006;MoEVT,2005;WHO,1978).

Studies done in most developing countries identified that the school with well-trained head teachers were the key player or backbone of the school and the main decision-makers of School Management (WHO, 1978). The overall effectiveness of the school was directly influenced by the head teacher. Her/his roles included to be the facilitator, broker, resources provider, but also encouraged, commanded, questioned, coached and inspired others in all issues including health matter to maintain good health practice (Temeke Municipality,2012).

However, the pre-service training and in-service training varied significantly in approach and methods around the world and within the least developed countries while teacher's supervision improved professional development and quality education. The school committee, ministry of education and the community have been crucial stakeholders for promoting teachers development and high quality education in the schools and contributed greatly to professional development and improved teaching practice (Mosha,1995)..

The programme of providing health education to the pupils by using teachers has shown great success in many developing countries (WHO, 1978; Temeke Municipality, 2012; Rogan & Grayson, 2003).

Several studies have shown that teachers preparation on health education teaching was lacking in many developing countries except for Uganda, where in-service approach has been in operation since 1987 and pre service training is now being developed (Mangrulkar,et.al.,2001;VinceWhitman&Aldinger,2009; Also Uganda had many exciting examples of innovation and development within school health education generally and AIDS education in particular. For example in Uganda health education was well integrated into the basic science subject with 60% focusing on science subject and 40% based on specific health education subject.

This has shown significant positive changes in behavior that lower student risks behavior (UNESCO, 1992; Postlewaithe, 1998; Miguel & Kremer, 2004).

Studies done in developing countries identified that in service training and development of teachers if carried out through various health education training approaches increased teachers' skills and knowledge on health issues. For example, the ministry of education in Uganda conducted training that guided teachers in what to teach on health education subjects in primary schools (MOES, 2001; UNESCO, 1992; Miguel & Kremer, 2004).

Special training and workshops on prevention of communicable diseases in schools including HIV and AIDS prevention were conducted for health educators who in turn, became trainers of teachers (Postlewaithe, 1998; Miguel & Kremer, 2004). AIDS education was integrated into education syllabus. The programme was well resourced with innovative materials thus teachers were trained to teach others. Evidence from the pupils showed insight into a wide variety of health issues including a detailed understanding of AIDS prevention, environmental health and sanitation (Williams, 2000). In service training and development of teachers was carried out through various health education training approaches which increased teachers' skills and knowledge on health issues. Teachers training for health education was carried out for 10-days' since 1989 as a special training programme for pre service teachers. For example, the training guided teachers in what to teach on health education subjects in primary schools (Miguel & Kremer, 2004).

Apart from that special training and workshops on AIDS prevention were conducted for health educators who in turn, became trainers of teachers. Currently health education programme introduced into basic teachers training college as a specialized subject area for primary school teachers' programme in Uganda (Williams, 2000).

Furthermore, Another studies shows that the empowered teachers played a big part in achieving quality health education for example the de-worming programme for school children done in Guinea, Malawi and Kenya primary schools was assessed to have been successful because the programme was directly supervised by teachers after receiving in services training and seminars on health topics (WHO, 1999; Lockheed, 1991).

In Guinea, the School based de-worming programme was implemented and teachers were involved in the implementation of school health intervention. The outcome showed failing scores from 32 per cent to 23 per cent over three years while passing grades improved (Lockheed, 1991). Moreover the benefit cost ratios were achieved when deworming was combined with sanitation, clean water supply and health education (Rogan & Grayson, 2003).

The study done in Malawi identified that supervisors, school management and education administrators were crucial for promoting teacher development and high quality education in the schools and contributed greatly to professional development and improved teaching practice (Miguel & Kremer,2004;Blasé & Blase,1999).

Also another the study conducted in Malawi found that if the school managers were empowered they could play their social and technical roles more efficiently (Mosha, 2000).Their ability depended on the way it had been empowered by education administrators and supervisors; human resources and material resources available; managerial knowledge, skills on health issues of the Head Teacher and the school culture (Dillon-Peterson, 1986; USAID, 2006).

However the study done in Zambia reported that deworming programme team trained teachers on administering simple deworming medicines which were administered by teachers without side effects. The result shows that the programme reduced school absenteeism by 25 per cent but also increased the participation of children in schools (MOEU, 1999; USAID, 2006).

Taking advantages on existing teacher training systems and incorporating deworming within a comprehensive school health framework also the study identified that the programme allowed efficiency and cost effectiveness in parasite control in school age children through school health intervention, (MOEU, 1999).

The study done in Kenya has shown that school health programme based on deworming guideline; in 2009 Kenya National School Health Policy adapted a school based De-worming Programme. Through the programme, 1,000 district level staff and 16,000 teachers were trained to deliver de-worming drug effectively. Where 3.6 million school children were dewormed in 8,200 schools (Dillon-Peterson, 1986).

The study done in Mombasa schools in Kenya showed that teachers supported with in service training as well as external workshop training based on health issues improved significantly in their abilities to use child centered teaching and learning good health behaviours (Rogan & Grayson 2003).

There was a well-established School Health Education Programme, which was supported by policy and established coordinating mechanisms at central level and relatively well researched needs assessment and evaluation (Babishangire, 1992).

Another study done in Tanzania noted that teachers trained for implementation of a comprehensive primary school health education curriculum positively acquired teachers preparedness teaching skills based on health education issues and has positive effects both on curriculum implementation and on pupils' outcomes (Rogan & Grayson, 2003; Lockheed, et.al.1991).However in Tanzania and elsewhere health education has been found to be an integral part to the mission of primary schools. The provision of health education is guided by the Tanzania National Science Curriculum (2005) which aims to provide young people with the knowledge and skills they need to become successful learners, healthy and productive adults (PEDP,2006).

The curriculum identifies key cross cutting health education issues to be taught according the class levels from standard one up to standard seven. Such issues include.Health education based on communicable diseases, disease prevention, food hygiene and nutrition and quality of food, HIV and AIDS basic need for human life, safe and security, environment, health services for diseases prevention, first aid kit and reproductive health (PEDP,2006;MoH,1990,2007).

In Tanzania usually there is no curriculum indicating science subject to be taught specifically in primary schools therefore curriculum indicating general science subject to be taught in schools according the class level from standard one up standard seven .The following are the science topics taught apart from health

education sub topics stated above this including; Human body example reproductive system, plants example growth and reproductive, Weather and solar system, Animals example animal feeding, water example water-borne diseases, Soil Example soil erosion, Energy example light, properties of matters, balancing and weighing and making work easier while in secondary school science subject are biology including health education subtopics, chemistry and physics (PEDP,2006;WHO,1978; MoEVT, 2005).

In Tanzania the proportion of teachers with pre-service training and their impact to promotion of health education varies between rural and urban areas and within regions. Another study noted that factor which affected quality health education teaching was the shortage of teachers in primary schools (ESDP, 2009).

In Tanzania despite having the policy related with school health program, in the country there has been no specific training but sporadic and isolated training done in various levels and not focused on health education curriculum for training teachers in teachers' colleges in Tanzania. However, the Ministry of Education and Vocational Training in Tanzania has always tried to upgrade teachers through in-service, but due to financial crisis, most teachers lack in services training and this problem is still far from being solved. The curriculum of primary schools in Tanzania is very tight with many subjects it often leads the gap between intention and practice {MoEVT 2006; Miske S, et al., 1998; URT 2006}.The entire subject had to be adapted by the teachers within the timetable of five days of teaching per week (PEDP.2006;MOEVT.2005).

National health policy of 1990 and 2007 in Tanzania provided the Greater attention to health promotion and protection services provides an optimal setting for improving health for all children and adolescents by focusing on health behaviors changing in school settings. Also the National health policy focused on Implementation of a comprehensive school health education program that requires teachers feel comfortable and prepared to teach specific health topics in school to

improve health education program and strengthen sensitization processes that will empower every person for effective behavioral change. (Mohr, 1990, 2007).

The Implementation of comprehensive school health education is to integrate school health services based on an assessment of school need to health care for millions of underserved school-aged children (MOEVT, 2005). .Also linked to the current school Health program under the Ministry of health and social welfare which based on primary health care (PHC) in Tanzania as indicated on 1990 and 2007 national health policy that the Primary Health Care strategy is the cornerstone for ensuring the provision of essential health care services for all citizens, with the objective aiming to achieve a level of service for providing accessible and sustainable Primary Health Care services for all citizens (Paul&Faustin,2005,MoH 1990 , 2007).

Apart from that Schools had been involved among the Primary Health care elements based on education that Education concerning prevailing health problems and methods of preventing and controlling them (MoH, 1990, 2007).

Also insisted that health education need to be strengthened and address issues related to agricultural development, child upbringing, environmental sanitation and development in general. School children shall be made a special target group for health program through sensitization for action, towards health promotion and disease prevention this strategy has facilitated successful coordination of health service provision by various stakeholders including education sector in primary schools (MoH, 1990, 2007).

Health education in most public primary schools in Tanzania had been not adequate provided due to the limited number of science subject teachers, who are also responsible to teach health related topics (Babishangire, 1995; MoH, 1990, 2007).

Moreover overcrowding of students in primary schools had been on the increase due to mainly increased population (ESDP,2009; The Primary Education Development Programme (PEDP, 2010) reported the ratio to be 1:120 meaning that one teacher to 120 pupils instead of the recommended 1:40 teacher-pupil ratio. This led to desperate increased number of pupils in classes and affected negatively the quality of

teaching in primary schools and performance of the teachers (PEDP, 2006; MOEVT, 2005, WHO, 1978).

In 2008/09, a total of 76 primary and secondary school teachers and 24 school inspectors in Southern and Highlands zone in Tanzania were trained on the use of the guideline for teaching Environmental health Education and Education for Sustainable Development In order to have well trained teachers the numbers and background of teachers recruited and deployed was important to be observed. In the financial year 2008/09, a total of 9,150 grades A Primary school teachers were recruited in Tanzania [6]. But due to change of reporting time for new teachers, the postings took place in September for 2009 and no teachers were posted to all councils in 2008/09 thus increasing the shortage of primary school teachers in all subjects (PEDP,2006; (MOEVT, 2005).

The study In Mbozi District, found out that about 36.3 per cent of the teachers in primary schools had not yet attained the required teaching qualifications in various subject. Thus the need to upgrade teachers from grade IIIC/IIIB to grade IIIA was stressed but with emphasis to develop a teacher professional development model that addresses the specific requirements of the country (Mangrulkar, 2001). The considerable number of primary school teachers trained had completed Standard Seven and had attended teacher training course for a period not exceeding two years [5, 11].(PEDP,2006;Vinewhitman & 2001).

Another studies noted that a total number of 48 Training of Trainers (TOT) comprising of three Education Officers per district from Dar es Salaam, Pwani and Morogoro regions were trained on implementation of Environmental Management Act (EMA) (UNESCO, 1992). Also a total of 300 teachers in the regions of Kigoma, Rukwa, Mbeya, and Kagera received training on HIV/AIDS and life skills education in which they were to teach pupils in their respective schools (MOEVT, 2005).

Organizational support for teaching and learning takes many forms, including measures such as advocating for better conditions and professional development, respecting teachers' autonomy and professionalism and developing inclusive

decision making processes. Such supports have been shown to be poorly managed and have impact on teaching and learning (MoH, 2001; ESDP, 2006).

The challenges of teaching primary health education in developing countries such as Tanzania are broad, grouped into political, social and economical and professional challenges. The enrolment of pupils in primary schools is increased and usually done without considering corresponding increase in number of the skilled teachers. The implication of this is that the pupils may not acquire good health practice skills and this may impact their present and future well-being (Mangrulkar, 2001; Vince Whitman, 2009).

However health education challenges facing primary schools are more based on professional challenges and limited resources for teachers during their pre-service training and in services training in teachers college (Becky, et al, 2003; Miske, et al, 1998).

Since 2008/09 the budget allocated in each financial year in Tanzania for the Ministry of education and Vocational Training was not enough to buy the support materials which would make teaching and learning easy especially ability to apply theory knowledge in to practice. Because of these challenges, associated with the sudden increase of pupils population due to UPE, financial, materials and human resources problems had not been given sufficient attention since the state economy did not develop that fast to cope with the situation in all primary schools (Miske, et al, 1998).

In 1998, the Tanzania Partnership for Child Development programme carried out a study in Lushoto district focusing on worm infection control and personal hygiene. The programme identified that many of good healthy behaviours were adapted and maintained in the school through school health sanitation intervention by the effort of well skilled teachers on health sanitation (URT, 2006).

Furthermore, the Child Friendly Schools Project was conducted in Makete, Bagamoyo, Temeke, Magu, Mtwara (R) and Hai District Councils where a total of 2,650 primary school teachers and tutors were trained on participatory teaching and

learning approaches and on HIV and AIDS in school health intervention implementing programme (Paul & Faustin, 2005).

Apart from that the study identified that training focused not just on academic skills but also teachers acquired skills on teaching basic lifesaving skills including health. These skills include, hand-washing, hygiene, preventing the spread and impact of HIV/AIDS. Apart from that training of teachers and tutors raised motivation of teachers, improved teaching competence and increased use of practical teaching material in schools and in teachers' colleges (Paul & Faustin, 2005).

Moreover; the 1995 Education and Training Policy noted that in Tanzania, most primary schools faced teacher's deficit in all areas, mainly in science subject including lack of qualified and experienced teachers on health related topics (MOEVT, 2005).

Another study conducted in Temeke Municipality indicated that only few 214 primary school teachers that were 6% from 107 public primary school got health education training and other related health issues 2 teachers from each school were assigned and received health training in Temeke Municipal. After the training, teachers were assigned to teach science subject including health issues in their school (Temeke Municipality 2012; Paul & Faustin, 2005).

Also it was been observed that teachers had experienced low and irregular salary payments, lack of proper housing, had inadequate teaching facilities and limited opportunities for professional development, low status and had poor incentives. This decreased teachers' morale and affected their performances (Temeke Municipality 2012; Paul & Faustin, 2005).

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter consists of the proposed study area, study design, study population, data processing and analysis.

3.2 Study Area

The study was conducted in Temeke Municipal, one of the three municipals of the Dar es Salaam Region. Administratively, Temeke Municipality is divided into 3 divisions, namely Mbagala, Chang'ombe and Kigamboni with 30 wards. Temeke Municipal Council Educational sector is comprised of pre-primary, primary, secondary, and Vocational Training and Adult Education sub-sectors. Temeke Municipality consists of 134 primary schools of which 107 are public and 27 are private. The total number of primary school teachers is 4207 out of which 3782 are in public schools (Temeke Municipality, 2012)

3.3 Study Design

The study design was a cross-sectional descriptive study which applied both qualitative and quantitative approaches.

3.4 Study Population

The study population was Primary school science teachers in Temeke Municipal.

3.5 Sample Size

The sample size of this study was calculated using the following formula,

$$n = \frac{z^2 p (100-p)}{\epsilon^2}$$

Whereby n = sample size,

z=standard deviation,

p= the proportion of primary school teachers who teach science subjects and

ϵ = stands for the accepted margin error.

Given that z standard was corresponding to 95% confidence the value of z was 1.96

Z is confidence level which is 1.96 (standard normal deviation corresponding to 95% confidence level)

E is the margin error allowed 3%

p = proportion of expected Prevalence of primary school teachers who teach science subjects with in service training background on teaching health education is (6%) in Temeke Municipal Dar es salaam (Temeke Municipality,2012) .

Therefore the sample size was:

$$\text{sample size} = \frac{1.96^2 \times 6 \times (100-6)}{3^2}$$

Therefore, based on these results, the targeted minimum sample size was 240, However to cater for non-response rate, 10% was added to make a sample size of 265.

3.6 Sampling Technique

The study applied multi-stage sampling to get the sample. First, two divisions out of the three divisions and two ward were randomly selected. All primary schools within the selected wards were included in the study. Finally, all science subject teachers from the schools were selected to participate in the study.

3.7 Data Collection Procedures

The data for this study was collected between March 2013 and May 2013. Before data collection, the data collection tools were pre-tested in 4 schools which were not involved in the study. Two Research assistants were recruited trained on how to conduct interviews using the structured self-administered questionnaires.

3.8 Data Collection Methods

The data were collected through the following methods:

3.8.1 Structured Questionnaire

The structured self-administered questionnaires were administered to 265 science subject teachers in 20 selected primary schools. The questionnaires were designed to generate information on: demographic characteristics, teaching experiences, health education background of teachers teaching science subject, criteria used to assign teachers to teach health education and challenges faced by teachers in teaching the subject. Suggestions on how to improve teaching health education in schools, and health problems faced in the schools was also collected.

3.8.2 Observation

Observation method was employed in 20 primary schools and generated information on the general cleanness of the school compounds particularly, the hygienic status of the school toilets. The indicators used to assess the school toilet as indicated below in table 3. A checklist was used to generate data on the toilet building structure (i.e. whether the buildings are permanent or temporal, if the walls are well painted, if there is cement floor, if the floor is made of tiles, whether doors are available and working, whether doors provided privacy (whether door are available, whether door available and working, whether the door has lock). Others include, Availability of containers for disposal of solid waste, Availability of water for washing hands, cleanliness of the environment surrounding the toilet, whether the toilet has running water or there is a container for keeping water.

Table 1: Indicators used to assess the cleanliness of the school toilets.

Sn	Indicator variable	Score	Criteria*
1	Toilet building structure (<i>Permanent building, Wall well painted, Cement floor/ tiles, Well fixed lid</i>)	0=very poor 1=Poor 2=Good 3=Very good	-Incomplete Building, Structure with cracks on the walls, and cracks on the floor. -Permanent building Structure with floor cracks

			<p>and walls cracks.</p> <ul style="list-style-type: none"> -Permanent building structure with floor cracks -Permanent building, wall well painted. Cement floor or tiles with no cracks, vent available and lid is well fixed.
2	<p>Door for privacy (<i>Door available ,Door available and working ,Door lock</i>)</p>	<p>0=Very poor 1=Poor 2=Good 3=Very good</p>	<ul style="list-style-type: none"> -No door for privacy -Temporal door no privacy - Door for privacy is available but not working properly - Door for privacy available and working
3	Toilet smell	<p>0=Very strong 1=Strong 2=Moderate 3=No urine smell at all</p>	<ul style="list-style-type: none"> -Very strong smell from urine/stool -Strong urine smell -Slight smelling -No smell and attract users
4	Urine on the floor	<p>0=Very poor 1=Poor 2=Good 3=Very good</p>	<ul style="list-style-type: none"> -Floor is wet with urine -Urine seen only around the pit -Urine not seen on the floor -The room is dry no urine seen on the floor
5	Presence of cobs and flies	<p>0=Very poor 1=Poor 2=Good 3=Very good</p>	<ul style="list-style-type: none"> -Many fliers and cobs seen around the toilet -Some fliers and cobs seen around the toilet -No fliers and cobs seen

			<p>around the toilet</p> <ul style="list-style-type: none"> -Room is clean and no cobs and fliers
6	Presence of feaces around the pits	<p>0=Very poor</p> <p>1=Poor</p> <p>2=Good</p> <p>3=Very good</p>	<p>Feaces seen around the room and room is wet</p> <ul style="list-style-type: none"> -Feaces seen around the pit -No feaces seen around the room -Room looks clean and attract users
7	Availability of containers for disposal of solid waste	<p>0=Very poor</p> <p>1=Poor</p> <p>2=Good</p> <p>3=Very good</p>	<ul style="list-style-type: none"> -No containers for sanitary pads -Sanitary pads available but not in use/full -Sanitary pads available and are in use -Sanitary pads available attract users
8	Availability of water for washing hands	<p>0=Very poor</p> <p>1=Poor</p> <p>2=Good</p> <p>3=Very good</p>	<ul style="list-style-type: none"> -No running water -Containers with no water -Container with water -Running water available.
9	Cleanliness of the environment surrounding the toilet	<p>0=Very poor</p> <p>1=Poor</p> <p>2=Good</p> <p>3=Very good</p>	<ul style="list-style-type: none"> -Tall grass presence of litters -Few litters -No tall grass and litters -No tall grass, no solid litters and the area swept.

*Authors definitions based on the field observation.

3.9 Data processing, analysis and presentation

Responses obtained from the study participants were coded and computerized.

The data was entered in Statistical Package for Social statistical software (SPSS) programme version 20. Running of frequencies was done in order to check for data entry errors. Data errors that were identified were corrected by referring to a specific question with errors on the questionnaire. The cleanliness of the toilets was assessed using scores from an observation checklist (Appendix V) based on the pre-defined indicators variables. After data cleaning, frequency with percentage for categorical variables were obtained for all variables and were further analyzed as presented in the next chapter.

3.10 Ethical Considerations

Ethical approval for the study was sought from the MUHAS/ Institutional Review Board. The director of Temeke Municipal granted permission to conduct the research in his municipal. To ensure ethics the head teachers were informed prior the actual data collection. Principal investigator or research assistant provided participants with information related to the aim of the study. Participation was voluntary and every participant was free to withdraw from the study at any time without penalty. Written informed consent was obtained from participant. Confidentiality was assured all the time. All information obtained was taken confidentially; In order to maintain anonymity, no names or any participant identifying information appeared anywhere on the questionnaire. The questionnaire was numbered instead of using respondent's name to ensure confidentiality.

3.11 Limitations

The study focus was limited in validity scope and area coverage. It focused on only three aspects of sanitation, including the toilets, availability of water and the existing sciences teachers. This may not be sufficient basis for making general inference on the real health practice of teachers in teaching health education. Therefore the findings of this study may not be generalized but provide insight into the factors that act as barriers to successful implementation of health education within specific context.

CHAPTER FOUR

4.0 Results

4.1 Introduction

This chapter presents the results of the study and it is divided into six (6) sections. Section one is about introduction of the chapter, section two presents characteristics of the study population. Section three presents the results on the proportion of teachers with health education background and section four focus on the criteria used to assign teachers to teach health education in the schools. Section five provides the results on the reflection of health education teaching on the general environment of the schools' toilets. The last section is about challenges faced by teachers in teaching health education.

4.2 Socio-Demographic Characteristics of the Study Population

The socio-demographic characteristics of the study population are summarized in Table 2. Of the 265 science teachers, 224 (83.5%) were female. Nearly half (46.0%) of the respondents were aged below 35 years. Most of the respondents (87.5%) had secondary level education and the majority (92.8%) had attained certificate education as their professional award.

Six percent of the respondents had attained Advanced level of secondary school education prior teaching college. Very few (2.6%) attained university education. Almost Forty five percent of the teachers had working experiences of less than 7 years and about one in ten had an experience of more than 12 years.

Table 2: Socio-Demographic Characteristics of the Study Population

Characteristics	N=265	Percentage
Age group		
Below 35	122	46.0
35-44	74	27.9
45 and above	69	26.0
Sex		
Female	224	83.5
Male	41	15.5
Level of education		
Primary education	11	4.2
Secondary education	231	87.2
Advance secondary education	16	6.0
University	7	2.6
Working experience		
Less than 7 years	119	44.9
7-12 years	112	42.3
12 years and above	34	12.8
Professional award attained		
Certificate education	246	92.8
Diploma in education	7	2.6
Advanced Diploma in Education	2	0.8
Degree in Education	10	3.8

4.3 Proportion of teachers with Health Education Background

Of the 265 respondents, 69.4% received health education training before they started teaching. Over half of the primary school teachers had attended some health education training during, teachers training college, secondary education, or from other stakeholders.

Several responses were used to determine the proportion of teachers who attended some health education in the past. The majority (76.6%) of the respondents said they got some health education training from teachers' college. More than one in five (22.8%) of the study participants were exposed to such courses while in secondary schools and 12.5% received similar background from Government agencies. A few respondents received some background training in health education from NGO (9.2%) and Private organizations (0.5%). While (58.9%) respondents had not attended any seminar or workshop on health education before and since they started teaching.

4.4 Criteria Used to Assign Teachers to Teach Health Education

More than three out of every four respondents 203(76.6%) said that they became health education teachers by being assigned by school authority. With regards to the criteria used to be assigned the task of teaching health education, 30.6% said they were assigned based on their interest in teaching health education topics. Other criteria include having health education training background and having long teaching experience, these criteria were mentioned by 22.6% and 24.5% of the respondents respectively. The criteria are summarized in the table 3.

Table 3: The Criteria Used to Assign Teachers to Teach Health Education (HE)

Health education background	N==265	
Percentage		
Who assigned teachers to teach HE		
School authority		
Yes	203	76.6
No	62	23.4
Having interest in teaching HE		
Yes	81	30.6
No	184	69.4
Having HE training background		
Yes	60	22.6
No	205	77.4
Having long teaching experience		
Yes	65	24.5
No	200	75.5

4.5. Teaching of Health Education in School

4.5.1 Schools Health Education Guidelines

Teachers were asked if they knew that their schools had health education guidelines. Majority of the respondents (95.8%) reported that their schools had the guidelines for teaching health education. With regards to the methods used to teach health education, 92.1% reported that both theory and practical methods were used in teaching the subject, 7.2% said theory only and a few (0.4%) said only practical were used.

Almost three-quarters of the teachers (71.3%) said the practical were conducted within the school compound and 3% said that field visit sometimes conducted. Nearly half of the respondents (77.4%) reported that the type of the practical given

include cleaning of the school environment, mentioned general body cleanliness and (66.6%). Hand washing after visiting the toilet, before eating and after eating and food preparation 26.4%,

4.5.2 Health Sub Topics Teachers Taught In Primary School

It was of interest to know whether personal hygiene, environmental and sanitation topics were taught in the schools. Results showed that majority (97%) of teachers reported to teach environment and sanitation topics in their schools, and majority (97%) of the teachers reported to teach personal hygiene topics to their schools.

Very few teachers (3%), regardless of their background reported that they had never taught environmental and a sanitation topic in their classes, and the case was similar for the personal hygiene topics in school. Only 3% of the teachers responded that they never taught their pupils topic concerning personal hygiene. Other sub topic teachers reported to be taught including ;About 96.6% HIV and ADIS,96.6% Food hygiene ,first aid 96.2%,Safety and security 87.9% and reproductive health 78% reported to be taught upper class standard six up to Standard seven.

4.5.3 Cleanliness of School Toilets

The cleanliness of the toilets was assessed using scores from an observation checklist see (Appendix V). Table 4 defines each variable used in assessing the cleanliness of the school toilets. The general environment of the schools' toilets (hygiene status) of both pupils and teachers' toilet aiming to identify health practice behaviors was assessed based on scores obtained from observation checklist. (Appendix V). The Toilet used as an example to explore the extent to which the school environment reflects what is taught in health education.

The highest overall score was 27 and the lowest score was 0. Based on the score obtained each toilet was assessed using the following criteria.

School toilets with less than 7 points were categorized as very dirty, those with score between 8 and 15 were categorized as dirty. Toilets with 16 to 23 scores were classified as clean and those with 24 or more scores were in the very clean category. These criteria were used for assessing the general cleanliness of both pupil's and teacher's toilets in 20 schools involved in this study.

Pupils' Toilets

All the schools had separate toilets for male and female pupils. Only 30% of the schools in the study area had special toilets infrastructure for disabled. Majority (90%) of the toilets was pit latrines. More than half (55%) of the pupils' toilets were dirty. Twenty five percent were in the very dirty category and only 20% were found to be clean. None of the pupil's toilets at the schools were found to be in very clean status.

There was a wide variation across the different toilet cleanliness criteria which contributed to the overall score in the schools. As summarized in Table 4, no school had a container for disposal of solid waste such as sanitary pads in the female toilets. More than third (40%) had poor privacy for users and 70% had very poor toilet structures. Smell was strong in 65% of the toilets and the general cleanliness of the toilet rooms was dirty in more than half (55%) of the schools.

Table 4: Scores Variations in Assessing Cleanliness of Pupils' Toilets

Criteria	No of toilets=20	Percentage
Container for Solid Waste		
Not Available	20	100.0
Very dirty		
Moderate		
clean		
Very clean		
Door privacy		
Very Poor	6	30.0
Poor	3	15.0
Good	8	40.0
Very good	3	15.0
Toilet smell		
Very strong	5	25.0
Strong	8	40.0
Moderate	5	25.0
No urine smell	2	10.0
Urine in the Floor		
Very Poor	4	25.0
Poor	7	35.0
Good	5	20.0
Very good	4	20.0
Presence of cobs and flies		
Very Poor	6	30.0
Poor	5	25.0

	Good	6	30.0
	Very good	3	15.0
Fiscal disposal			
	Very Poor	3	15.0
	Poor	1	55.0
	Good	11	5.0
	Very good	5	25.0
Toilet structure			
	Very Poor	7	35.0
	Poor	7	35.0
	Good	4	20.0
	Very good	2	10.0
Water availability in the toilet			
	Very Poor	10	50.0
	Poor	1	5.0
	Good	7	35.0
	Very good	2	10.0
Cleanliness of the environment surrounding the toilet			
	Very Poor	5	25.0
	Poor	3	15.0
	Good	4	20.0
	Very good	8	40.0

Teachers' Toilets

The cleanliness of teachers' toilets was assessed using the same scoring criteria as that of the school pupils. (Appendix VI). The results summarized in Table 5 shows that, unlike pupils' toilet, 5% of the teachers' toilets were very clean. Only 40% of the staff toilets were in the clean category. In contrast, nearly half (45%) of the staff toilet were dirty and 10% of the staff toilets were very dirty.

Table 5: Teachers' Toilets Cleanliness Status

Scores	(N=20)	Percentage
Very poor	2	10.0
Poor	9	45.0
Good	8	40.0
Very Good	1	5.0

Table: 6 Shows that, regarding the general cleanness 30% of the teachers' toilets were hygienically good. The majority (80%) of the staffs' toilets were hygienically good in considering the presence of urine on the floor. Unlike pupils' toilets, 40% of the staff toilets had a very good score, depending on the criteria of door for the privacy. Based on the criteria of smell of the toilets, 80% and 15% of the staff toilets had hygienically moderate smell and attracted the user.

Table 6: Scores of the Teachers' Toilets on Criteria Used to assess the cleanliness

Criteria	N=20	Percentage
Container for solid waste		
Not available	19	95.0
Available and clean	1	5.0
Availability of water		
Very Poor	7	35.0
Poor	2	10.0
Good	5	35.0
Very good	6	20.0

Presence of cobs and flies

Very poor	1	5.0
Poor	13	65.0
Good	6	30.0

Fiscal disposal

Good	3	85.0
Very Good	17	15.0

Urine on the floor

Good	4	80.0
Very good	16	20.0

Toilet smell

Very strong	2	10.0
Strong	3	45.0
Moderate	6	30.0
No urine smell	9	15.0

Door privacy

Very poor	6	30.0
Poor	2	40.0
Good	4	20.0
Very good	8	10.0

Toilet structure

Very poor	9	45.0
Poor	4	20.0
Good	3	15.0
Very good	4	20.0

Environments around latrine

Very poor	2	10.0
Poor	3	45.0
Good	6	30.0
Very good	9	15.0

4.5.2 Relationship between Teaching of Health Education and the General Environment of the School Toilets

In order to examine the relationship between what is taught about health education in the schools and the general environment of the schools' toilets, Contingency table was used to see associations between the pupils' toilet hygiene score and the explanatory variables i.e. whether health education practical were conducted in the school.

Table 7 depicts that, In contrast, 33.3% of primary schools with practical for health condition were found to have good toilets hygiene than those primary schools 9.1% with no practical for health education. Moreover, The results indicated that the schools with high number of 6-8 teachers who teach health education does not necessary increase the quality of hygiene in schools. Also the decrease number of pupils in the school does no increase the quality of hygiene in the schools.

Table 7: Cross Tabulation showing relationship between Hygiene Status of the Pupils' Toilets and Some Explanatory Variables

Are there any practical for health education	Hygiene status of the pupils' toilets			Total
	Very poor	Poor	Good	
YES	44.4%	22.2%	33.3%	100.0%
NO	63.6%	27.3%	9.1%	100.0%

4.6: Challenges teachers faced when teaching health education

All respondents (N=265) admitted that they faced challenges in teaching health education at their schools. Among the challenges faced, a limited resource was mentioned by 31.4% of the respondents. Of the 265 respondents, 53 (20%) and 56 (21%) reported high number of pupils to few teachers and unfriendly class/school environment was mentioned by more than one out of every five teachers

respectively. The rest of the respondents, 16.2% mentioned the challenges such as limited knowledge of teachers to teach and monitor health education and 11.4% mentioned lack of specialized curricula. About 18.2% teachers had the feeling that they are not competent in teaching health education.

In conclusion results of this study generally show that most teachers had not attended in-service training. The results show that teachers were assigned by authority to teach health education in primary schools based mainly on their pre-service background knowledge from the teachers' training institutes. On the job experiences and interest of the teacher on teaching health education, few had been exposed to in-service training. Though health education teaching guidelines were in place, the quality of health education was, in most schools found to be highly challenged by limited resources, high number of pupils to available few teachers and facilities and limited knowledge of teachers to teach health education.

CHAPTER FIVE

5.0 Discussion

Provision of effective health education is important to pupils in primary schools who are the future citizens. Tanzania, through the Ministry of Education and Vocational Training is committed to ensuring provision of quality primary education to all as the most reliable process of putting opportunities directly into people's hands. This was evidenced by the policy guidelines and PEDP Programme, revision of Curricula and resources provided to primary school education system (PEDP (2006), ESDP (2009), WHO (1978)).The current study has found out that teachers teaching health education in Temeke Municipal primary schools in Dar es Salaam faced a number of challenges. These challenges led to ineffective provision of health education and ultimate poor education quality for children in primary schools in Temeke Municipal.

The study revealed that most teachers (69.4%) had received health education training before they started teaching. Over half of the primary school teachers had attended some health education training during secondary education, teachers training college or from other stakeholder. But many respondents (58.9%) had not attended any seminar or workshop on health education before and since they started teaching. The results of current study indicated that most teachers had background in health education topics before starting teaching health but had limited knowledge and skills on health education due to lack of in services training. And those who had no background on health education before and after training had low quality of teaching health education lessons [7].

There was no proper and systematic in-service development plan and training for seminars and workshops or refresher courses but sometimes happened rarely and/or sporadically [30].

The study found out that in-service teachers lacked health education training opportunity at work and increase the poor quality health education among the teachers with health education teaching background and those who teach health education without health education background.

This study identified that when the teachers reported at work, the criteria used to assign them to teach health education was mainly based on having interest and rarely on having teaching health education training background or experience. This is a challenge to effectively teach health education in Temeke primary schools. Such a challenge has been reported in studies done in other countries [12, 13]. This led to have teachers with very limited knowledge and skills to provide quality health education.

Other studies done in Tanzania show that teachers teaching environment in most schools also affected the provision of quality health education as it is difficult to apply theory in to practice this hinders pupils to adopt good health behavior practice [4,5].

This study has shown that most schools had Health Education Teaching Guidelines. However there was lack of sufficient supportive environment for provision of effective health education environmental, sanitation and the personal hygiene topics in primary schools mainly due to lack of resources to implement the guidelines. There was, in almost all schools, the overcrowding problem. There were large numbers of pupils per class, with teacher to pupil ration of 1:120 [4].

Notwithstanding the above challenges, Tanzania had made significant progress towards attaining Millennium Development Goal 2 of Primary school enrolment. However increase in population and enrollment did not match with available resources in terms of adequate and well trained and qualified teachers, educational materials, sufficient number of classrooms and toilet with pupil's ratio [4, 5].

The lack of resources was complicated with lack of corresponding investments in school infrastructures for safety, water and sanitation facilities for sanitation and hygiene. This affected negatively the quality of teaching in primary schools and performance of the teachers.

CHAPTER SIX

6.0 CONCLUSION AND RECOMMENDATIONS

6.1. Conclusion

Through the study acknowledged that the health education provided in primary schools in Temeke Municipality Dar Salaam and Tanzania as a whole was inadequate and ineffective and was influenced greatly by the factors around and/or faced by the teachers teaching health education.

The major challenges were related to the lack of well define pre-service and in-service training system, the criteria for appointing the teachers to teach health education and the extent the school environment had enough resources and infrastructures and environment to promote heath education in primary schools

The pre- and in-service have to be addressed through improvement of the teaching curriculum and syllabus for pre- and in-service training which currently does not considered health education as apriority in primary schools.

The capacity of the teacher was to be backed by the subjective criteria for assigning the teachers to teach health education and supportive school environment at primary schools which reflects such as basic health facilities included health education taught. In addition the adequate resources for schools and teachers teaching health education has to be made available.

6.2 Recommendations

1. Since this study revealed that teachers had limited knowledge and skills for teaching health education, it is recommended that health education should be added as a subject in curriculum in teachers college to have competent teachers.
2. The current study has taken school sanitation as an example based on school toilet and noted that teachers teach other health sub topics such as food hygiene, reproductive health, communicable disease including HIV and AIDS. There is a need for further research to see health practice and health behaviors among the teachers and pupils.
3. This study observed that a high number of teachers who teach health education do not increase the quality of hygiene within the school. Continuous Supportive supervision among the teachers and pupils is recommended to address poor health practice and to promote health.
4. The findings of this study are expected to be informing the policy makers, education planners and other related stakeholders to design the right intervention to mitigate the teaching resources material problem and poor working environment. This would in turn create the good environment for the teachers and pupils to provide quality health education.
5. Health education is fundamental for adapting and practicing good health behavior through the human development stage. It is influenced by many factors including actors and their inter-relationships. In order for teachers to provide effective teaching health education in primary schools in Temeke Municipality Dar es Salaam, the following are recommended.
 - i. To improve the pre- and in-service training syllabus curriculum and development of health education programme for the teachers has to be focused and improved.

- ii. The criteria for selecting teachers to carry out health education in primary school and other level institutes should be based on competence and training done by selected teacher.

- iii. Thirdly, the school physical and non-physical environment should be conducive for pupils and teachers to practice health education principles such as to apply health theory taught in to practice aiming to impact health skills and knowledge.

- iv. Fourthly, adequate resources – financial, human, material and others should be available for maintaining schools health intervention and school health promotion

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APPENDICES

APPENDIX 1: INFORMED CONSENT FORM ENGLISH VERSION

INTRODUCTION

The structured interview will be used to collect the data in this school. Section 1; 1.B Will be the general information of this school which will be collected from the head teacher. Section 1; 1.B will be the information from the teacher who teaches science subject, the researcher and research assistant will collect the observed data.

SECTION1:1 A: SCHOOL INFORMATION

HEAD TEACHER

Dear Head Teacher,

The purpose of this structured interview is to collect relevant information that will be used to identify challenges facing Primary School teachers in teaching health education in Temeke Municipal, Dar es Salaam. Main aim is to generate background data for potential interventions. I would like assure you that all information provided through this research will be handled with extreme confidentiality and reported in away so as to preserve the name of the head teacher.

This Structured interview questionnaire does not require you to personally identify yourself. You are therefore kindly requested to answer honestly questions asked. Codes and symbols will be used instead of the name. The researcher and research assistants are requested to fill the space provided and circle the correct answer given from the head teacher.

Informed consent

INTRODUCTION:

My name is Niwabigira Wilhelmina Rugaimukamu I'm working on this research study with the objective of identify barriers to effective health education teaching in primary school inTemeke Municipal, Dar es Salaam.

Participation:

If you agree to participate in this study the following will occur:

You will sit with interviewer and answer questions.

You will be interviewed only once for approximately 20-30 minutes in a private setting.

Confidentiality and consent:

I'm going to ask you some very personal questions that some people find difficult to answer. Your answers are completely confidential. Your name will not be written on this form, and will never be used in connection with any of the information you provide. You do not have to answer any questions that you do not want to answer, and you may end this interview at any time you want to. However, your honest answers to these questions will help us to understand the challenges facing primary school teachers in teaching health education in Temeke Municipality Dar es Salaam.

Can I go ahead? We would greatly appreciate your help in responding to this research. The interview will take about 20-30 minutes. Are you willing to participate?"

Who to contact

If you ever have questions about this study, you should contact Principal Investigator, Niwabigira Wilhelmina

Mobile: 0713445599, Muhimbili University of Health and Allied Sciences (MUHAS), P.O. Box 65001, Dar es Salaam.

Agreement of the Participant

Do you agree?

Yes

No

I (CODE instead of the name).....have read and understood the contents in this form. My questions have been answered. I agree to participate in this study.

Signature of participants

Signature of research assistant.....

Date of signed consent

Thank you for your cooperation

APPENDIX II: QUESTIONNAIRE FOR (ENGLISH VERSION)

NAME OF THE SHOOOL.....

SECTION 1:2 A. GENERAL INFORMATION OF THE SCHOOL

The head teacher you are requested to respond on general information asked section 1; 2 A about this school.

Let us talk about general information of this school. The following question pertains to available human resources and number of pupils in this school. Please give accurate data.

The researcher and research assistants are supposed to fill the space given and circle the correct answer from the head teacher

1. How many teachers are in the school? Total
2. How many are science teachers? Total.....
3. How many science teachers do teach health education? Total

4. How many teachers without background in science teach health education?
Total.....
5. How many pupils do you have in this school? Total
- 6 What is the number of Boys..... What is the number of Girls
7. How many class rooms are available in this school from STD one up to STD seven? Total...
8. How many classrooms are missing in this school? Total.....

APPENDIX III: INFORMED CONSENT FORM SWAHILI VERSION SEHEMU YA KWANZA DODOSO (A)

MKUU WA SHULE

UTANGULIZI

Mpendwa Mkuu wa shule Lengo la dodoso hili ni kupata takwimu sahihi hili kubaini changamoto wanazo kumbana nazo walimu katika ufundishaji wa soma la elimu ya afya katika shule za msingi wilaya ya Temeke Dar es Salaam Tanzania.

Dhumuni kuu ni kupata taarifa sahihi ili kusaidia katika kutafuta namna ya kuboresha ufundishaji huo. Sehemu 1;1A hinahusu taarifa za jumla za shule hii mwalimu mkuu ndiye atakaye husika na kujibu maswali yote yanayo husu kipengele hiki. Sehemu 1;1 B .Kitahusu taarifa kutoka kwa walimu wanao fundisha somo la sayansi katika shule hii na walimu wanaofundisha somo hilo watahusika kujibu maswali na Kiongozi wa utafiti na msaidizi wa utafiti watahusika kuangalia na kutoa takwimu sahihi za uchunguzi kwa kutumia mkoba wa kazi (**observation by checklist**)

Unaombwa ushirikiano mkubwa hili tuweze kufanikisha utafiti wetu.

Ridhaa ya Kushiriki katika utafiti huu

Unaombwa kushiriki katika utafiti huu.

Ushiriki.

Ukikubali kushiriki katika utafiti huu: kiongozi wa utafiti na mtafiti msaidizi watajitaidi kutumia muda kati ya dakika 20 hadi 30 ili waweze kujaza majibu sahihi utakayotoa katika nafsi iliyo achwa wazi pamoja na kuzungushia duara jibu sahihi katika maswali ya kuchagua .

Usiri

Nakuhakikishia kwamba taarifa zote zitakazokusanywa kutoka kwako zitakuwa ni siri, ni watu wanaofanya kazi katika utafiti huu tu ndio wanaweza kuziona taarifa hizi. Hatutaweka jina lako au taarifa yoyote ya utambulisho kwenye kumbukumbu za taarifa utakazotupa alama tu zitatumika badala ya jina .

Utaulizwa maswali juu ya ufahamu wako kuhusu “Changamoto zinazozikabili shule za msingi katika ufundisaji Elimu ya afya katika wilaya ya Temeke,. Baadhi ya maswali yanaweza yasikupendezesi lazima kujibu swali kama hilo na unaweza kusimamisha usaili wakati wowote.

Kumbuka pia kwamba Kushiriki katika utafiti huu ni uchaguzi wako, kama utachagua kutokushiriki au utaamua kusimamisha kushiriki katika hatua yoyote ya utafiti huu ni hiari yako na haitakuathiri kwa namna yoyote. Kukataa kushiriki au kujitoka katika utafiti hakutasababisha adhabu yoyote au upotevu wa haki unazostahili kupata ..

Endapo Utadhurika;

Hatutegemi madhara yoyote kutokea kwa kushiriki kwako katika utafiti huu.

Mtu wa kuwasiliana naye:

Kama una maswali katika utafiti huu unaweza kuwasiliana na kiongozi wa utafiti Niwabigira Wilhelmina Rugaimukamu, Chuo Kikuu cha Muhimbili, S.L. P. 65001, Dar es Salaam (Simu. no. 0713485599).

Kama unakubali au unakataa tafadhali tia tiki katika kiboksi kimojawapo hapa chini.

Mshiriki amekubali

Mshiriki amekataa

Mimi ----- (CODE) alama itatumika badala ya jina

_____ nimesoma/nimeielewa hii fomu, maswali yangu yamejibiwa. Nakubali kushiriki katika utafiti huu.

Sahihi ya mshiriki _____

Sahihi ya shahidi (kama hawezi kusoma na kuandika) _____

Sahihi ya mtafiti _____

Tarehe ya makubaliano _____

Asante kwa ushirikiano wako

SEHEMU YA KWANZA

JINA LA SHULE:

SEHEMU I: A. TAARIFA ZA SHULE

Mwalimu mkuu wa shule hii ndiye anaye husika jibu sahihi kwa kila swali linalo ulizwa katika sehemu ya kwanza kipengele (a) Kiongozi wa utafiti na mtafiti msaidizi watajaza jibu sahihi katika sehemu hiliyoachwa wazi na vievile kuzungushia jibu sahihi litakalo tolewa na mwalimu mkuu katika maswali yote ya kuchagua.

Kabla hatujaendelea mbele ebu tuzungumzie kidogo taarifa za jumla za shule hii kuhusu rasilimali watu shuleni yaani wanafunzi na walimu kwa ujumla wao.

1. Je kuna walimu wangapi katika shule yako? Idadi
2. Je kuna walimu wangapi wa sayansi? Idadi
3. Je ni walimu wangapi wa Sayansi wanafundisha Elimu ya afya? Idadi

- 4 .Je ni walimu wangapi ambao sio wa sayansi wanafundisha Eimu ya afya?
.....
5. Je shule ina jumla ya wanafunzi wangapi? Idadi.....
6. Je Wavulana Wasichana
7. Je kuna vyumba vingapi vya madarasa kuanzia darasa la kwanza hadi darasa la Saba.....
8. Je vyumba vingapi vya madarasa vinahitajika?

APPENDIX IV:

SECTION 1: 1B. INFORMATION FROM THE RESPONDENTS

Dear Respondent,

The purpose of this structured interview is to collect relevant information that will be used to identify challenges facing Primary School teachers in teaching health education in Temeke Municipal, Dar es Saalam. Main aim is to generate background data for potential interventions.

I would like assure you that all information provided through this research will be handled with extreme confidentiality and reported in away so as to preserve the name of the respondent.

This Structured interview questionnaire does not require you to personally identify yourself.

You are therefore kindly requested to answer honestly questions asked. Codes and symbols will be used instead of the name.

The researcher and research assistants are requested to fill the space provided and circle the correct answer given from the respondents.

INFORMED CONSENT

INTRODUCTION:

My name is Niwabigira Wilhelmina Rugaimukamu I am working on this research study with the objective of identify barriers to effective health education teaching in primary schools in Temeke Municipal, Dar es Salaam.

Participation:

If you agree to participate in this study the following will occur:

You will sit with interviewer and answer questions.

You will be interviewed only once for approximately 35-40 minutes in a private setting.

Confidentiality and consent:

I'm going to ask you some very personal questions that some people find difficult to answer. Your answers are completely confidential. Your name will not be written on this form, and will never be used in connection with any of the information you provide. You do not have to answer any questions that you do not want to answer, and you may end this interview at any time you want to. However, your honest answers to these questions will help us to understand the challenges facing primary school teachers in teaching health education in Temeke Municipality Dar es Salaam.

Can I go ahead? We would greatly appreciate your help in responding to this research. The interview will take about 20-30 minutes. Are you willing to participate?"

Who to contact;

If you ever have questions about this study, you should contact Principal Investigator, Niwabigira Wilhelmina Niwabigira-mobile 0713445599, Muhimbili University of Health and Allied Sciences (MUHAS), P.O. Box 65001, Dar es Salaam.

If you have questions about your right as a participant, you may call Prof. Moshi, Chairman of the College Research and Publications Committee, P.O. Box 65001, Dar es Salaam. Tel: 2150302-6 and Prof .Melkizedek Leshabari who is the supervisor of this study.

Agreement of the Participant

Do you agree?

Yes

No

I (CODE instead of the name).....have read and understood the contents in this form. My questions have been answered. I agree to participate in this study.

Signature of participants

Signature of research /research assistant.....

Date of signed consent

Thank you for your cooperation

NAME OF THE SHOOOL.....

SECTION 1:2 B. GENERAL INFORMATION OF THE RESPONDENT

The respondent you are requested to respond on general information on section 1; 2 B about you self.

Before we start let us talk a bit about yourself (Please the researcher and research assistants you are requested to fill the space given and circle the correct answer from the respondent).

8. Sex of the respondent:

- 1. Male ()

2. Female ()

9. How old are you? years.

What is your date of birth?

10. What level of education have you completed?

1. Primary school education ()

2. Secondary school ()

3. Advanced secondary school education ()

4. Did not complete high school

5. University education / College level ()

6. Did not complete University / College ()

11. What is your professional award?

1. Certificate award ()

2. Diploma award ()

3. Advanced diploma award ()

4. Degree award in Education ()

5. Others (specify).....

SECTION 2 . 1: HEALTH EDUCATION TEACHING BACKGROUND .

Let us now talk a bit on teaching health education in this school.

12. How long have you been working in this school?

13. Were you ever taught the topics you teach in health education before starting to teach health education?

1. Yes ()

2. No ()

14. If yes, where were you taught?

1. During teacher training ()
2. In secondary school ()
3. Seminar/workshop organised by the government after joining teaching ()
4. Seminars/workshops organised by NGO's after joining teaching ()
5. Other private organisations please specify.....

15. Which topics were you taught to teach before starting teaching health education?

Please explain.

16. After starting to teach health education have you been to seminars or workshop on topics you teach?

1. Yes ()
2. No () *Go to question 18*

17. If yes, who organized it?

1. Government ()
2. Local government ()
3. NGO's ()
4. Other private organizations please specify.....

18. Which health education sub topics do you teach? (Tick the relevant answer)

Tick (V) under any corresponding answer

1. Personal hygiene, ()
2. Safe and clean water ()
3. Environmental sanitation, ()
4. Communicable diseases (including HIV/AIDS) ()
5. Food hygiene ()
6. First aid ()

7. Safety and security ()

8. Reproductive health ()

19. For how long have you taught health educationyears

20. Are you able to complete the health education topics in the syllabus?

1. Yes () go to question 22

2. No ()

21. If no what are the major constraints?

1.

2.

3.

4.

SECTION 2.2: CRITERIA USED TO ASSIGN TEACHERS TO TEACH HEALTH EDUCATION IN THE SCHOOL.

Let us talk about criteria used for deciding who should teach health education in this school

22. Do teachers request to teach the subject or are they assigned?

A. Teachers request ()

B. Teachers are assigned to teach ()

C. Others (please explain)

.....

23. How did you get selected to teach health education in this school?

.....

.....

24. Who assigns teachers to teach health education in this school?

1. Ministry of education and vocational training authority ()

2. Local government authority ()

3. School committee ()

4. Head teacher ()

5. Others specify

25. Which criteria are used in this school to assign teachers to teach health education in different classes?

1. Teachers with long teaching experiences ()

2. Teachers with back ground on health education training ()

3. Any Teacher interested in health education teaching ()

4. Any available teacher ()

5. Available teacher without regarding his/her health education background ()

6. Those who get health education training though seminars or workshop ()

7. Any teacher who teach science subject ()

8. Other specify.....

26. Does the school have guidelines for teaching school health in different classes?

1. Yes ()

2. No () *go to question 28*

27. If yes have you ever seen it?

1. Yes ()

2. No ()

28. Do you give assignments on the health education topics which you teach?

1. Yes ()

2. No ()

29. Are there any practical's on these topics?

1. Yes ()

2. No () *go to question 31*

30. If yes give examples of practical on these topics you have taught

1.....

2.....

3.....

31. Which methods do you use to teach health education in this school?

1. Theory ()

2. Practical methods ()

3. Both theory and practical methods ()

32. Do the practical take place within or out of the school compound?

1. Within the school ()

2. Outside the school compound ()

3. Both outside and within school compound ()

33. Are these practical in groups or individual?

Please specify

1. Individual ()

2. Group ()

3. Both in groups and Individual ()

SECTION 2.3 : IMPROVING TEACHING HEALTH EDUCATION IN PRIMARY SCHOOLS.

Let us now talk a bit about monitoring of quality of health education in schools.

34. Is teaching health education supervised?

1. Yes ()

2. No () Go to question 37

35. If supervised who does it.....

36. Do you get any feedback on how to improve health education teaching?

1. Yes ()

2. No () go to question 37

SECTION 2.4: CHALLENGES OF TEACHING HEALTH EDUCATION

Let us talk about the challenges if any which you face in teaching this subject.

37. Do you face any challenges in teaching health education in this school? (*Tick the relevant answer*)

- 1. Yes ()
- 2. No () Go to question 39

38. If yes, what are these challenges?

- 1.....
- 2.....
- 3.....
- 4.....

39. What are the major health problems in this school (Please fill the space)?

- 1.....
- 2.....
- 3.....
- 4.....

40. What can be done to reduce common health's problems facing this school?
(Please fill the space).

- 1.....
- 2.....
- 3.....
- 4.....

APPENDIX IV : IDHINI YA KUSHIRIKI KATIKA UTAFITI

SEHEMU (B) DODOSO

MHOJIWA

UTANGULIZI

Mpendwa Mhojiwa

Lengo la dodoso hili ni kupata takwimu sahihi hili kubaini changamoto wanazo kumbana nazo walimu katika ufundishaji wa soma la elimu ya afya katika shule za msingi wilaya ya Temeke Dar es Salaam Tanzania. .Dhumuni kuu nikupata taarifa sahihi ili kusaidia katika kutafuta namna ya kuboresha ufundishj huo.

Umechaguliwa kama mmoja wa watuwatakaoshiriki katika utafiti huu. Unaombwa ushirikiano mkubwa hili tuweze kufanikisha utafiti wetu. Tunakuhaidi kuwa taarifa utakazo zitoa zitatunzwa kwa usiri mkubwa na jina lako halitaandikwa badala yake tutatumia alama tu. Tunaomba pia utupe majibu ya uhakika kwa kuwa majibu yako ni muhimu sana katika kufanikisha utafiti huu. Mtafiti na mtafiti msaidizi wataandika majibu katika nafasi zilizoachwa wazi na kuzungushia jibu sahihi katika maswali ya kuchagua.

Ridhaa ya Kushiriki katika utafiti huu

Habari! Naitwa Niwabigira Wilhelmina Rugaimukamu ni mtafiti mkuu katika utafiti huu wenye lengo la kuangalia“Changamoto zinazozikabili shule za msingi katika ufundisaji Elimu ya afya katika wilaya ya Temeke, Dar es Salaam Tanzania”Utafiti huu una lengo la kukusanya taarifa juu ya “Changamoto zinazozikabili shule za msingi katika ufundisaji Elimu ya afya katika wilaya ya Temeke, Dar es Salaam Tanzania”

Unaombwa kushiriki katika utafiti huu.

Ushiriki.

Ukikubali kushiriki katika utafiti huu:

1. Utapewa maelekezo na mtafiti au mtafiti msaidizi namna ya kujibu maswali yatakayo jazwa na mtafiti mkuu na mtafiti msaidizi , ukishaelewa tutakuomba muda wako wa dakika 35 hadi 40 ili mtafiti mkuu na mtafiti msaidizi waweze kujaza majibu sahihi katika nafsi iliyo achwa wazi pamoja na kuzungushia duara jibu sahihi katika maswali ya kuchagua .

2. Hakuna taarifa zozote za utambulisho tutakazokusanya wakati wa usaili isipokua umri na kiwango cha elimu.

Usiri

Nakuhakikishia kwamba taarifa zote zitakazokusanywa kutoka kwako zitakuwa ni siri, ni watu wanaofanya kazi katika utafiti huu tu ndio wanaweza kuziona taarifa hizi. Hatutaweka jina lako au taarifa yoyote ya utambulisho kwenye kumbukumbu za taarifa utakazotupa alama tu zitatumika badala ya jina .

Utaulizwa maswali juu ya ufahamu wako kuhusu “Changamoto zinazozikabili shule za msingi katika ufundisaji Elimu ya afya katika wilaya ya Temeke,. Baadhi ya maswali yanaweza yasikupendezesi lazima kujibu swali kama hilo na unaweza kusimamisha usaili wakati wowote.

Kumbuka pia kwamba Kushiriki katika utafiti huu ni uchaguzi wako, kama utachagua kutokushiriki au utaamua kusimamisha kushiriki katika hatua yoyote ya utafiti huu ni hiari yako na haitakuathiri kwa namna yoyote. Kukataa kushiriki au kujitoka katika utafiti hakutasababisha adhabu yoyote au upotevu wa haki unazostahili kupata..

Endapo Utadhurika;

Hatutegemi madhara yoyote kutokea kwa kushiriki kwako katika utafiti huu.

Watu wa kuwasiliana nao:

Kama una maswali katika utafiti huu unaweza kuwasiliana na mratibu mkuu wa utafiti Niwabigira Wilhelmina Rugaimukamu, Chuo Kikuu cha Muhimbili, S.L. P. 65001, Dar es Salaam (Simu. no. 0713485599). Kama utakuwa na maswali yoyote kuhusu haki zako kama mshiriki unaweza kupiga simu kwa Prof Moshi., ambaye ni

Mwenyekiti wa kamati ya chuo ya utafiti na machapisho, S.L.P 65001, Dar es Salaam. Simu namba: 2150302-6 na Prof. Melkizedek Leshabari ambaye ni msimamizi wa utafiti huu.

Kama unakubali au unakataa tafadhali tia tiki katika kiboksi kimojawapo hapa chini.

Mshiriki amekubali

Mshiriki amekataa

Mimi _____(CODE alama itatumika badala ya jina)_____ nimesoma/nimeielewa hii fomu, maswali yangu yamejibiwa. Nakubali kushiriki katika utafiti huu.

Sahihi ya mshiriki _____

Sahihi ya shahidi (kama hawezi kusoma na kuandika) _____

Sahihi ya mtafiti/mtafiti msaidizi _____

Tarehe ya makubaliano _____

Asante kwa ushirikiano wako

APPENDIX V- QUESTIONNAIRE FOR (KISWAHILI VERSION)

JINA LA SHULE

SEHEMU 1; B. TAARIFA ZA MHOJIWA

Ebu tuongeele juu ya taarifa za jumla za mhojiwa.

TAFADHALI MTAFITI NA MTAFITI MSAIDIZI CHAGUA NA
KUZUNGUSHIA JIBU SAHIHI KILA SWALI

8. Jinsi yake (Tafadhali jaza jinsia yake)

1. Ke ()

2. Me ()

9. 1. Je una umri gani.....

2. Taja tarehe na mwaka wa kuzaliwa

10. Ni kiwango gani cha elimu ulichofikia?

1. Shule ya msingi ()

2. Sekondari ()

3. Hukumaliza Elimu ya sekondari ()

4. Kidato cha sita ()

5 Hukumaliza kidato cha sita ()

6. Chuo kikuu ()

7. Hukumaliza chuo kikuu ()

8. Elimu nyingie Eleza.....

11. Je ulitunikiwa ngazi gani ya taaluma?.

1 Cheti ()

2. Stashahada ()

3. Stashahada ya juu ()

4. Shahada ()

5. Ngazi ya elimu nyingine

Eleza.....

SEHEMU YA 2.1 KUFUNDISHA ELIMU YA AFYA

Baada ya kupata taarifa za awali ebu tuzungunmzie juu ya walimu wanaofundisha somo la elimu ya afya katika shule hii .

12. Je katika shule hii umefanya kazi hii kwamuda gani? (Eleza).....

()

13. Ulishawahi kupata mafunzo yeyote ya mada ya elimu ya afya?

1. Ndiyo ()

2. Hapana ()

14. Kama ndiyo .Ni lini na wakati gani ulipata mafunzo ya elimu ya afya?

1. Wakati wa mafunzo ya ualimu ()

2. Wakati wa masomo ya sekondari ()

3. Kwenye semina/warsha zilizoandaliwa baada ya kujiunga na mafunzo

()

4. Mafunzo ya semina/warsha zinazoandaliwa na NGO's baada ya

kujiunga na mafunzo ()

5. Taasisi nyingine binafsi Eleza ni zipi.....

15. Ni mafunzo gani ulipata kabla ya kuanza kufundisha elimu ya afya? Tafadhali

eleza;

16. Baada ya kuanza kufudisha elimu ya afya ulishawahi kuhudhuria semina au mafunzo juu ya unachofundisha?

1. Ndiyo ()

2. Hapana () Nenda suala la 18

17. Kama jibu ni ndiyo, nani waliratibu mafunzo hayo?

1. Wizara ya elimu ()
2. Tamisemi ()
3. Taasisi sisizo za kiserikali ()
4. Taasisi nyingine za watu binafsi Elezea.....

18. Ni mada gani za elimu ya afya huwa unafundisha? (Weka alama ya V penye jibu sahihi)

1. Usafi wa mtu binafsi ()
2. Maji Safi na salama ()
3. Usafi wa mazingira ()
4. Magojwa ya kuambukizwa ()
5. Usafi wa chakula ()
6. Huduma ya kwanza ()
7. Elimu ya uzazi ()
8. Usalama na afya ()

19. Ni kwa muda gani umekuwa ukifudisha elimu ya afya ? Miaka

20. Je, unaweza kumaliza mada zote juu ya elimu ya afya kwenye mtaala washule?

1. Ndio ()
2. Hapana () Nenda swali la 21

21. Kama ni hapana ni vikwazo gani vinasababisha usiweze kumaliza mada zote?

1.
2.
3.
4.

**SEHEMU YA 2; 2: VIGEZO VINAVYOTUMIKA KUWACHAGUA
WALIMU WA KUFUNDISHA MASOMO YA ELIMU YA AFYA**

*Sasa tuzungumzie kuhusu utaratibu wa kupangia walimu ufundishaji wa somo la
Elimu ya afya katika shule hii*

22. Je walimu huwa wanaomba kufundisha mada ya elimu ya afya au
wanapangiwa?

1. Walimu naomba ()

2. Walimu upangiwa ()

3. Njia nyingine

Eleza.....
.....
.....

23. Ni utaratibu gani uliotumika kukupangia kufundisha elimu hapa afya hapa
shuleni? Tafadhali elezea

.....
.....
.....

24. Ni nani anayewapangia waalimu kufundisha somo la afya hapa shuleni?

1. Wizara ya elimu na mafunzo ya ufundi ()

2. Kamati ya shule ()

3. Tamisemi ()

4. Mwalimu mkuu ()

5. Njia nyingine (tafadhali eleza)

.....
.....
.....

25. Vigezo gani vinavyotumiwa kupanga waalimu wa kufundisha masomo ya elimu ya afya hapa shuleni?

1. Uzoefu wa muda mrefu ()
2. Historia ya mafunzo ya elimu ya afya ()
3. Wanaopendelea kufundisha elimu ya afya ()
4. Mwalimu yeyote ()
5. Mwalimu yeyote bila kujali historia ya ufundishaji ()
6. Wale wanaopata mafunzo juu ya elimu afya kwenye semina yeyote inayofundisha elimu ya afya ()
7. Wale tu wenye uzoefu wa kufundisha masomo ya sayansi ()
8. Vigezo vinginevyo (*Eleza*)

26. Je, shule hii ina mwongozo ya kufundishia elimu ya afya katika madarasa tofauti?

1. Ndio ()
2. Hapana () Nenda swali la 28

27. Kama ndio je umeshawahi kuuona huo mwongozo?

1. Ndio ()
2. Hapana ()

28. Je wanafunzi wanapewa mzoezi juu ya elimu ya afya wanayofundiswa?

1. Ndio. ()
2. Hapana () Nenda swali la 31

29. Je kuna mazoezi ya vitendo kwenye juu ya mada za elimu ya afya wanayofundishwa?

1. Ndio ()
2. Hapana () Nenda swali la 31

30. Kama ndio toa mifano ya mazoezi wanayo pewa kuhusiana na masomo ya afya wanayo fundishwa ?

- 1.....
- 2.....
- 3.....

31. Ni njia gani zinatumiwa kufundisha elimu ya afya katika shule hii?

1. Nadharia ()
2. Vitendo ()
3. Njia zote mbili ()

32. Je, mazoezi yanafanyika katika mazingira ya shule au yanafanyika nje ya shule?

1. Mazingira ya shule ()
2. Nje ya mazingira ya shule ()
3. Nje na ndani ya mazingira ya shule ()

33. Hayo mazoezi ni ya vikundi au mtu mmoja?

Tafadhali eleza

- 1 Kwa vikundi ()
- 2 Kwa mtu moja moja ()
3. Vyote viwili ()

**SEHEMU YA 2.3; IV USIMAMIZI WA KUBORESHA ELIMU YA AFYA
KATIKA SHULE ZA MSINGI**

Ebu sasa tuzungumzie kidogo kuhusu usimamizi wa kuboresha elimu ya afya katika shule za msingi

34. Je ufundishaji wa mada ya la elimu ya afya unasimamiwa?

1. Ndiyo ()
2. Hapana () nenda swali la 37

35. Kama ndio je ni nani anafanya usimamizi?

Eleza.....

36. Je, mnapata mrejesho wowote juu ya namna yakubosha elimu ya afya?

- 1 .Ndio ()
2. Hapana () nenda swali la 37

**SEHEMU YA 2: 4...CHANGAMOTO ZA UFUNDISHAJI ELIMU YA AFYA
KATIKA SHULE ZA MSINGI**

Sasa tuzungumzie juu ya changamoto za ufundishaji elimu ya afya katika shule za msingi

37. Je, mnakumbana na chagamoto zozote katika ufundishaji wa somo la elimu ya afya katika shule hii. ?

1. Ndio ()
2. Hapana () Nenda swali la 39

38. Kama ni ndio hizo changamoto nizi? Taja

- 1.....
- 2.....
- 3.....
- 4.....

39. Ni matatizo gani makubwa ya kiafya yaliyopo katika shule hii?

- 1.....
- 2.....
- 3.....
- 4.....
- 5.....

40. Nini kifanyike ili kupunguza changamoto na matatizo ya kiafya yanayoikabili shule hii?

- 1.....
- 2.....
- 3.....
- 4.....

APPENDIX VI: OBSERVATION OF DATA (ENGLISH VERSION)

OBSERVATION OF DATA

TITLE

**THE CHALLENGES FACING PRIMARY SCHOOL TEACHERS IN
TEACHING HEALTH EDUCATION IN TEMEKE MUNICIPALITY,**

DAR ES SAALAM.

NAME OF THE SHOOOL.....

SECTION: 3.0 HYGIENIC STATUSES OF SCHOOL TOILET

SECTION: 3. 1. GENERAL INFORMATION ON SCHOOL TOILET

The researcher and research assistants are requested to make an observation on general information on school toilet, fill the space given and circle the correct answer observed about toilet facilities in this school

Let us talk about toilet facilities in this school.

1. Does the school have latrine for pupils?

1. Yes ()

2. No () *Go to question 3*

2. Are there separate toilets for the Male and female pupils?

1. Yes ()

2. No ()

3. Does the school have separate toilets for male and female staff?

1 Yes ()

2. No ()

3. Use same toilets with pupils ()

4. No toilets ()

4. Does the school have toilet facilities for disabled pupils?

1. Yes ()

2. No ()

5. What type of toilet?

1. Pit ()

2. Eastern ()

3. Western ()

6. How many holes are there? ... Femalemale... (pupils) Female.....Male.....
(Teacher)

7. How many Pit hole required

8. Is there water in the toilets?

1. Yes ()

2. No () *go to the check list*

9. If yes what is the source of water?

1. Tape water ()

2. Containers ()

3. Others specify

SECTION 3.2: SCHOOL TOILET FACILITIES OBSREVATION

11. OBSERVATION

SCORING PROCEDURE

There are nine (9) items to be observed in each toilet that is; Toilet structure, door for privacy, .smell, .urine on the floor , general cleanliness, faecal disposal,

containers for sanitary pad, availability of water and environment surrounding the toilet.

The highest score will be number 3 named as very good and the lowest score will be 0, named very poor.

SECTION 3. 2 A: PUPILS TOILETS OBSREVATION

THE CATEGORY AND SCORES FOR PUPILS' TOILETS

The researcher and reach assistant will be required to put a tick (V) each observation made in the score list below

Category	Very good (3)	Good (2)	Poor (1)	Very poor (0)
1.Toilet Structure	Toilet structure is in good condition example. Permanent building, wall well painted. Cement floor or tiles with no cracks ,vent available and lid is well fixed	Permanent building structure with floor cracks	Permanent building Structure with floor cracks and walls cracks	Incomplete Building, Structure with cracks on the walls, and cracks on the floor
2. Door For Privacy	Door for privacy available and working	Door for privacy is available but not working properly	Temporal door no privacy	No door for privacy
3.Smell	No smelling (air fresher in place and attract the users)	Slight smelling	Strong smell	Very strong smelling from urine/stool, very dirty due to lack of cleanliness
4.Urine On The Floor	The room is dry no urine seen on the floor	Moderate drops of urine seen.	The room is wet and a lot of urine seen on the floor	The floor is full of urine
5.General Cleanliness	The room kept clean no cobwebs and flies seen	The room kept clean with few cobwebs and flies seen around the	The room kept dirty and flies seen cobwebs	The room is very dirty many cobwebs seen and full of

		room	around the room	flies seen around the room
6.Faecal Disposal	Faeces not seen around the hole and the room looks clean and dry	Few faeces around the hole seen and the room looks wet	Many faeces around the hole seen and the room looks dirty and wet	Many faeces surrounding the room seen and room looks very dirty and wet
7. Containers For Sanitary Pad for faecal disposal, disposal of solid waste.	Very clean containers for sanitary pad seen and in use.	Dirty containers for sanitary pad seen	Very dirty containers for sanitary pad also used pad seen on the floor.	Containers for sanitary pad not available
8. Availability of water	Tape water available within the toilet and in use .Piece of soap found in the place and place for hand washing is on safe area.	Tape water available but not in use. Containers for water keeping are available and contain water but the user shared the dirty small tin. Piece of soap not seen.	No tape water & containers for water keeping available not in use & no pieces of soap	Tape Water is not available, No containers for water keeping & no piece of soap for use
9.Environment Surrounding the latrine	All areas surrounding the toilet is clean with short grass and the area is free from flies, solid and liquid waste and other insect breeding	The area is dirty. Few litter seen surrounding the toilet	The environment surrounding the toilet is full of litters and no cleaning is carried out	All areas surrounding the toilet is very dirty with tall grasses, stagnant water, source of breeding flies and other insects
Total Score	27	18	9	0

APPENDIX VII: SECTION 3.2 B : TEACHERS TOILETS OBSREVATION

SECTION3:

THE CATEGORY AND SCORES FOR STAFF TOILET

The researcher and reach assistant will be required to put a tick (V) each observation made in the score list below

Category	Very good (3)	Good (2)	Poor (1)	Very poor (0)
1.Toilet Structure	Toilet structure is in good condition example. Permanent building, wall well painted. Cement floor or tiles with no cracks ,vent available and lid is well fixed	Permanent building structure with floor cracks	Permanent building Structure with floor cracks and walls cracks	Incomplete Building, Structure with cracks on the walls, and cracks on the floor
2. Door For Privacy	Door for privacy available and working	Door for privacy is available but not working properly	Temporal door no privacy	No door for privacy
3.Smell	No smelling (air fresher in place and attract the users)	Slight smelling	Strong smell	Very strong smelling from urine/stool, very dirty due to lack of cleanliness
4.Urine On The Floor	The room is dry no urine seen on the floor	Moderate drops of urine seen.	The room is wet and a lot of urine seen on the floor	The floor is full of urine
5.General Cleanliness	The room kept clean no cobwebs and flies seen	The room kept clean with few cobwebs and flies seen around the room	The room kept dirty and flies seen cobwebs around the room	The room is very dirty many cobwebs seen and full of flies seen around the room
6.Feecal	Faeces not seen around the hole and	Few faeces around the hole	Many faeces around the hole	Many faeces surrounding the

Disposal	the room looks clean and dry	seen and the room looks wet	seen and the room looks dirty and wet	room seen and room looks very dirty and wet
7. Containers For Sanitary Pad for fecal disposal, disposal of solid waste.	Very clean containers for sanitary pad seen and in use.	Dirty containers for sanitary pad seen	Very dirty containers for sanitary pad also used pad seen on the floor.	Containers for sanitary pad not available
8. Availability of water	Tape water available within the toilet and in use .Piece of soap found in the place and place for hand washing is on safe area.	Tape water available but not in use. Containers for water keeping are available and contain water but the user shared the dirty small tin. Piece of soap not seen.	No tape water & containers for water keeping available not in use & no pieces of soap	Tape Water is not available, No containers for water keeping & no piece of soap for use
9.Environment Surrounding the latrine	All areas surrounding the toilet is clean with short grass and the area is free from flies, solid and liquid waste and other insect breeding	The area is dirty. Few litter seen surrounding the toilet	The environment surrounding the toilet is full of litters and no cleaning is carried out	All areas surrounding the toilet is very dirty with tall grasses, stagnant water, source of breeding flies and other insects
Total Score	27	18	9	0

APPENDIX VIII: OBSERVATION OF DATA (KISWAHILI VERSION)

UCHUNGUZI WA TAARIFA

KICHWA CHA HABARI

CHANGAMOTO ZINAZOWAKABILI WALIMU WA SHULE ZA MSINGI
KATIKA UFUNDISHAJI WA ELIMU YA AFYA MANISPAA YA TEMEKE,
DAR ES SALAAM

JINA LA SHULE.....

SEHEMU: 3.0 HADHI YA USAFI WA VYOO VYA SHULE HII

SEHEMU: 3.1TAARIFA KWA UJUMLA YA VYOO VYA SHULE HII

Mtafiti na msaidizi wake wanatakiwa kufanya uchunguzi wa taarifa kwa ujumla ya
vyoo vya shule,

***Jaza nafasi zilizoachwa wazi na uzungushie duara jibu sahihi kulingana na
uchunguzi wa vyoo uliofanyika katika shule hii.***

1. Je shule ina vyoo kwa ajili ya wanafunzi?

1.Ndio ()

2.Hapana () ***Nenda swali la 3***

2. Je vyoo vya wanafunzi wa kike na wakiume vimetenganishwa?

1. Ndio ()

2. Hapana ()

3. Je vyoo vya wafanyakazi wa kike na wa kiume vimetenganishwa?

1. Ndio ()

2. Hapana ()

3. Wanatumia vyoo pamoja na wanafunzi ()

4. Hakuna vyoo ()

4. Je shule ina vyoo maalumu kwa ajili ya wanafunzi walemavu

1. Ndio ()
2. Hapana ()

5. Aina gani ya choo?

1. Shimo ()
2. Eastern ()
3. Western ()

6. Je kuna mashimo mangapi ya vyoo?

1. MashimoKwa ajili ya wasichana
2. MashimoKwa ajili ya wasichana
3. Mashimo.....Kwa ajili ya wafanyakazi wa kiume
4. MashimoKwa ajili ya wafanyakazi wa kike.

7. Je mashimo mangapi yanahitajika?

1. Kwa ajili ya wavulana
2. Kwa ajili ya wasichana
3. Kwa ajili ya wafanyakazi wa kike
4. Kwa ajili ya wafanyakazi wa kiume

8. Je kuna maji kwenye vyoo?

1. Ndio ()
2. Hapana ()

9. Kama Ndio nini chanzo cha maji?

1. Maji ya bomba ()
2. Ndoo ya maji ()

3. Mengineyo..... Eleza

SEHEMU: 3.2 UCHUNGUZI JUU YA HALI YA VYOO VYA SHULE

11. UCHUNGUZI

Uchunguzi huu utafanyika kwakutumia orodha kwa vyoo vyote vilivyopo shuleni hapa. Orodha mbili zitatumika ili kulinganisha vyoo vya wanafunzi na vyoo vya wafanyakazi.

UTARATIBU WA UGAWAJI WA ALAMA

Kuna vipengele Tisa (9) vya kuchunguza kwa kila choo.ambavyo ni; Miundombinu ya choo, Milango ya faragha, Harufu, Usafi kwa ujumla, Mikojo kwenye sakafu, Kontena kwa ajili ya usafi wa padi, Usambazaji wa vinyesi, Uwepo wa maji na Mazingira yanayozunguka choo.

Alama ya juu itakua namba (3) ikimaanisha Vizuri sana na maksu ya chini (0) ikimaanisha Vibaya sana.

SEHEMU 3.2 A, UCHUNGUZI WA VYOO VYA WANAFUNZI

Mtafiti na msaidizi wake watatakiwa kuweka tiki (V) kwa kila uchunguzi utakaofanyika kwenye orodha hii hapa chini.

NAMBA	Vizuri sana	Vizuri	Vibaya	Vibaya sana
1.MIUNDOM BINU YA CHOO	Miundombinu ya choo ni mizuri mfano. Majengo ya kudumu, ukuta mzuri, sakafu nzuri isyona nyufa	Majengo ya kudumu yenye ufa sakafuni	Majengo ya kudumu yenye ufa sakafuni na ukutani	Majengo mabovu yenye nyufa ukutani na kwenye sakafu
2.MILANGO YA FARAGHA	Milango ya faragha ipo na inatumika	Milango ya faragha ipo lakini haitumiki	Ipo milango ya muda	Hamna milango
3.HARUFU	Hakuna harufu	Harufu kidogo	Harufu mbaya	Harufu mbaya sana
4.MIKOJO	Chumba ni kikavu	Matone ya mikojo	Chumba kina	Sakafu imejaa

SAKAFUNI	na hakuna mikojo sakafuni	yanaonekana	mikojo sakafuni	mikojo
5.USAFI KWA UJUMLA	Chumba kinatunzwa vizuri hakuna bui bui wala wadudu wowote	Chumba ni kisafi lakini kina bui bui na wadudu.	Chumba ni kichafu na kina buibui na wadudu	Chumba ni kichafu sana chenye bui bui na wadudu kila sehemu.
6.USAMBAZAJI WA KINYESI	Hakuna kinyesi kinachoonekana na chumba ni kisafi na kikavu	Kinyesi huonekana pembezoni mwa tundu na chumba kina unyevu	Kinyesi kingi huonekana pembezoni mwa tundu la choo pia choo ni kichafu.	Kinyesi kingi huonekana kwenye chumba na pia chumba ni kichafu sana
7.KONTENA KWA AJILI YA USAFI WA PADI	Makontena masafi ya usafi wa padi yapo na yanatumika	Makontena machafu ya usafi wa padi yanaonekana	Makontena machafu yanaonekana na padi zinaonekana zikiwa chini	Hakuna makontena ya padi yanayoonekana
8.MAJI	Maji ya bomba yapo na yanatumika.Sabuni inapatikana na ipo sehemu salama.	Maji yapo lakini hayatumiki.Makontena ya maji yapo na maji lakini watumiaji hutumia kopo moja chafu, hakuna sabuni.	Hakuna maji ya bomba wala ya kontena na .hakuna sabuni	Hakuna maji ya bomba wala ya kontena na .hakuna sabuni
9.MAZINGIRA YANAYOZU NGUKA CHOO	Mazingira yote yanayokizunguka choo ni masafi yenye nyasi fupi na hakuna mazalia yoyote ya wadudu	Mazingira ni machafu na taka taka huonekana katika mazingira ya choo.	Mazingira ya choo ni machafu yenye taka taka na hakuna usafi unaofanyika	Mazingira ya choo ni machafu yana nyasi ndefu na kuna mazalia ya wadudu
ALAMA	27	18	9	0

APPENDIX IX: SEHEMU: 3.2 B, UCHUNGUZI WA VYOO VYA WALIMU

Mtafiti na msaidizi wake anatakiwa aweke tiki (V) katika kila uchunguzi utakaofanyika kwenye orodha ya chini

NAMBA	Vizuri sana	Vizuri	Vibaya	Vibaya sana
1.MIUNDOMBINU YA CHOO	Miundombinu ya choo ni mizuri mfano. Majengo ya kudumu, ukuta mzuri, sakafu nzuri isyona nyufa	Majengo ya kudumu yenye ufa sakafuni	Majengo ya kudumu yenye ufa sakafuni na ukutani	Majengo mabovu yenye nyufa ukutani na kwenye sakafu
2.MILANGO YA FARAGHA	Milango ya faragha ipo na inatumika	Milango ya faragha ipo lakini haitumiki	Ipo milango ya muda	Hamna milango
3.HARUFU	Hakuna harufu	Harufu kidogo	Harufu mbaya	Harufu mbaya sana
4.MIKOJO SAKAFUNI	Chumba ni kikavu na hakuna mikojo sakafuni	Matone ya mikojo yanaonekana	Chumba kina mikojo sakafuni	Sakafu imejaa mikojo
5.USAFI KWA UJUMLA	Chumba kinatunzwa vizuri hakuna bui bui wala wadudu wowote	Chumba ni kisafi lakini kina bui bui na wadudu.	Chumba ni kichafu na kina buibui na wadudu	Chumba ni kichafu sana chenye bui bui na wadudu kila sehemu.
6.USAMBAZAJI WA KINYESI	Hakuna kinyesi kinachoonekana na chumba ni kisafi na kikavu	Kinyesi huonekana pembezoni mwa tundu na chumba kina unyevu	Kinyesi kingi huonekana pembezoni mwa tundu la choo pia choo ni kichafu.	Kinyesi kingi huonekana kwenye chumba na pia chumba ni kichafu sana
7.KONTENA KWA AJILI YA USAFI WA PADI	Makontena masafi ya usafi wa padi yapo na yanatumika	Makontena machafu ya usafi wa padi	Makontena machafu yanaonekana na padi	Hakuna makontena ya padi yanayoonekan

		yanaonekana	zinaonekana zikiwa chini	a
8.MAJI	Maji ya bomba yapo na yanatumika.Sabuni inapatikana na ipo sehemu salama.	Maji yapo lakini hayatumiki.Ma kontena ya maji yapo na maji lakini watumiaji hutumia kopo moja chafu, hakuna sabuni.	Hakuna maji ya bomba wala ya kontena na .hakuna sabuni	Hakuna maji ya bomba wala ya kontena na .hakuna sabuni
9.MAZINGIRA YANAYOZUNGUKA CHOO	Mazingira yote yanayokizunguka choo ni masafi yenye nyasi fupi na hakuna mazalia yoyote ya wadudu	Mazingira ni machafu na taka taka huonekana katika mazingira ya choo.	Mazingira ya choo ni machafu yenye taka taka na hakuna usafi unaofanyika	Mazingira ya choo ni machafu yana nyasi ndefu na kuna mazalia ya wadudu
ALAMA	27	18	9	0

