ENVIRONMENTAL CONDITIONS AFFECTING THE HEALTH OF CHILDREN IN EARLY CHILDHOOD CARE AND EDUCATION (ECCE) PROGRAMS IN KINONDONI MUNICIPALITY, DAR ES SALAAM

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By

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A Dissertation Submitted in Partial Fulfilment of the Requirements for the Degree of Masters of Public Health of Muhimbili University of Health and Allied Sciences

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CERTIFICATION

The undersigned, certifies that he has read and hereby recommend for acceptance by the Muhimbili University of Health and Allied Sciences a Dissertation entitled: **'Environmental conditions affecting the health of children in Early Childhood Care and Education (ECCE) Programs inKinondoni Municipality, Dar Es Salaam',** in fulfillment of the requirements for the degree of Master of Public Health of the Muhimbili University of Health and Allied Sciences.

Signature: _____

Name: Dr. David Urassa.

(Supervisor)

Date: _____

DECLARATION

AND

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And lastly, but not least, my appreciation with high gratitude goes to my family, specifically my dear husband for his heart-fully support throughout the program phase with the protection and merciful guidance from the almighty God our lord.

DEDICATION

Dedication to my beloved son, **Kaniel K. Clarence.** I do thank you through God for the tolerance displayed while I was perusing the course.

ABSTRACT

Background

Despite the increase of reports on poor health care management to children around the globe, little is still known about environmental conditions that affect health of children enrolled in Early Childhood Care and Education (ECCE) programs in the country. This study therefore was designed to assess the environmental conditions affecting the health of children enrolled to ECCE Programs inKinondoni Municipality, Dar es Salaam. The aim was to assess the level of implementation of national ECCE standards in registered ECCE programs, specifically by; describing the physical environment of these Programs in respect to required standards that affecting health of the enrolled early age children.

Methods

Cross-Sectional Quantitative study was conducted in 27 Wards of Kinondoni Municipality using a structured questionnaires and observation checklist. Using trained research assistants data was collected from 152 teachers of 52 ECCE programs in the Municipality. Programs' supervisors at both national and local Government level were also interviewed.

Results

The study indicated that, environment conditions of studied Programs' in the Municipality is not good enough for health development of enrolled children in respect to required national standards. Out of 52 studied programs, only 50% were located in safer locations *(away from main roads, public services)*:37% had poor *'size and safe playground for children'* while 37% had no '*playground'* at all. 69% had poor status of the *'available toilets'* and only29% had *'clean and safe toilets for children use'.* Moreover, 82% of interviewed teachers were aware of general national ECCE Programs' Environmental Conditions: but unfortunately, high proportional of these 82% teachers were misinformed with *standards for children healthy learning*.

Conclusion and Recommendations

Conclusively, the study revealed many challenges on Programs' environment conditions; and teachers' competence as basing on set national ECCE standards.

The government through the ECD/ ECCE committee must mitigate addressed challenges by mainstreaming health required standard to main ECCE programs. And all teachers are also recommended to be well trained and attend to refresher courses.

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ACRONYM

CCF……Christian Children's Fund

DICECE…….District Centres for Early Childhood Education

ECCD…….Early Childhood Care and Development

ECCDE……..Early Childhood Care Development and Education

ECCDF……..Early Childhood Care and Development Foundation

ECCE…….Early Childhood Care and Education

ECERS……..Early Childhood Environmental Rating Scale

FCC……First Call for Children

FETAC……..Further Education and Training Awards Council

GMPP……Growth Monitoring Promotion Program

HBC……..Home Based Care

LGA……..Local Government Authority

MCDWC…....Ministry of Community Development Women Affair and Children

MDG…….Millennium Development Goals

MVC…….Most Vulnerable Children

NACECE……..National Centre for Early Childhood Education

NPCD……...National Policy on Child Development

NSGRP…….National Strategy for Growth and Reduction of Poverty

OAU…….Organization of African Union

OAUCRC ……Organization for African Union Convention on the Right of Children

OVC…….Orphan and Vulnerable Children

PI ……..Principle Investigator

RC…….Resource or Recreation Centers

RCH……..Reproductive and Child Health

RSA……..Republic of South Africa

TECDEN……..Tanzania Early Childhood Development Network

UN…….United Nation

UNCRC…….United Nation Convention on the Right of Children

UNESCO……..United Nation Education Science and Culture Organization

UNICEF……United Nation Children Education Fund

VDC……..Village Development Councils

1. CHAPTER ONE

1.0 INTRODUCTION

1.1 Background information

Despite the guidelines on child development process, reports on poor health care management to children around the globe are increasing. With these factual reports therefore a special need for describing environmental conditions that affecting health and development of early age children remain to be of great importance.

This dissertation then provides findings from described environmental conditions prevailing in Early Childhood Care and Education (ECCE) programs that contribute in affecting health of the enrolled under-five children to the programs; in Kinondoni Municipality, Dar es Salaam region, Tanzania.

1.2 General meaning of Early Childhood Care and Education (ECCE) program.

The ECCE programs are within the category of Early Childhood Development (ECD) programs which aims at providing care for the under-five child development: specifically on intellectual, educational, spiritual, socio-cultural and health development. The basic type of services offered by ECCE program is pre-primary school services; such as nursery schools, pre-schools, day care centres and kindergarten services. Most of these programs are owned and implemented by communities, religious organizations, private and non-governmental organizations, also the public/government institutions.

With ECD Programs, these are projects and programs which provide care and service for children. They include all ECCE Programs, orphanage centres and remand.

1.3 General overview of the Environmental Conditions for child healthy learning in ECCE Programs.

The ECCE environmental condition is generally grouped into three main categories; the Physical environment; Programmatic overview; and the Provider's competence in implementing the program.

Table below illustrates the three above defined categories of ECCE Programs' environmental condition standards for child healthy learning.

ECCE Environmental categories.	**Clarification of the category**
Physical environment	Availability of clean and safe; Toilets for children, running/tap water, spacious playground, playing accessories, ventilation.
Programmatic overview	It includes; Children/teacher enrolment ratio, child/ teacher ratio in class routine, number of teacher per each class as according to age category of children, teacher/child: child-/teacher mutual respect, integrated health programs (nutrition and First Aid services).
Provider's competence	Teachers knowledge and competence on; Engaging to children activities, application of participatory learning strategy, professional support/supervision to a child, regular child monitoring in regard to defined ill health, maintaining children records, punctuality/attendance, attending trainings and refresher courses and teachers' education capacity.

Definitions of standard levels of the environmental conditions are summarized in Annexures 1. Countries (including Tanzania) are required to meet at least moderate level (60%) of each standard level of implementation. This is in order to safer-guild child's best interest.

1.4 Global overview of the ECCE Programs' Environmental Conditions.

Referring to the keynote address by Dr. Jack Shonkoff, director of the Centre on the Developing Child at Harvard University, during the Canadian delegation in Mosco, Russia at World Conference on Early Childhood Care and Education, 2010, it is clear that the environmental condition of ECCE programs requires high attention for healthy development of early age children enrolled to ECCE programs.

Dr. Shonkoff described what brain science says about child development: the benefits of healthy cognitive development, and the unhealthy effects of early-life hardships, both on the long-term health of the individual and on society. Dr. Shonkoff insisted on *how healthy environment contributes in building a strong foundation for effective learning that leads to better outcomes in academic achievement, responsible citizenship, lifelong health, and economic and human development.*

The European and Scandinavian countries particularly Ireland, Sweden and Finland, went further from Dr. Shonkoff by defining the quality of environmental conditions of ECCE programs and the way they determine cost for service. This is to say, a well-structured ECCE environmental condition, a highly paid for service.
The Scandinavian countries also defined measures to assess environmental quality of child care and early education, using two major categories: *structure and classroom process* (Currie, 2001). Structural measures of ECCE are divided into five groups: 1) length of ECCE sessions; 2) personnel ratios; 3) qualifications of personnel; 4) facilities; and 5) auxiliary services - health and nutrition.

Length of ECCE sessions vary from a few hours a day to twelve hours. Typically, the shorter sessions are more activity-intensive than the longer ones where only a portion of the longer day is organized into activities. But, the longer sessions are more appropriate for healthy development of a child.

Personnel ratio also is considered to be one of the key indicators of quality for ECCE services in the Scandinavian countries. The ratio varies from country-to-country in the Scandinavian. It is presumed that with more personnel, more services

can be provided and more attentive care can be given. With low ratios of personnel to children, ECCE becomes more limited to childcare, maintenance, and safety issues.

Qualifications of personnel and range of services are again considered to be key elements in the quality of environmental condition of ECCE programs. Staff qualifications may also vary by region within a country but the Scandinavian countries recognize that, personnel qualifications are considered an important determinant of quality of care and education for pre-schoolers. Presumably those with specialized training in early childhood education or strong teacher preparation are superior in their teaching ability and are able to make a perfect environmental condition for early learning of an early age child.

Along with the ratio of personnel to children and their qualifications, some ECCE programs provide comprehensive integrated activities for children in their programs; *such as psychological, medical, dental, and nutritional services.* These added services require additional specialized personnel beyond those needed for child care and education of children in the program.

Facilities also influence heavily the environmental characteristics of the ECCE programs. In some countries within the region, regularly provide extensive facilities characterized by many *specialized rooms and substantial space per child. Rooms are allocated not only for play, rest, teaching activities, and food preparation, but also for testing, counselling,* and special educational needs. In addition, bathrooms are specially designed with appliances that are accessible to children and with showers in case the children get unusually dirty. Offices for administrative and teaching personnel and for family conferences are also common.

The region has in place a standard methodology to assess the *Classroom process* practices for 3-5 year olds within the classroom, known as the Early Childhood Environment Rating Scale (ECERS) (Helburn & Bergmann, 2002). ECERS consists of 43 measures along seven dimensions of classroom services: personal care, furnishings and display, language and reasoning, activities, interaction, program structure, parents and staff needs. Others include meals and snacks, room

arrangement for play, books and pictures, music and movement, math/numbers activities, general supervision, staff interaction and cooperation. (Harms et al., 1998) To obtain a high ECERS score, ECCE programs need to have in place high staff-to-pupil ratios, appropriate teacher training in the classroom behaviours ECERS observes, physical environments that are conducive to learning, and appropriate materials.

Auxiliary Services -- Health and Nutrition is also defined as a goal of ECCE provision for the health of enrolled children in the region. The inclusion of health or nutrition services certainly increases the environmental quality of ECCE. The extent of provision (e.g. full service immunizations and physicals, number of meals per day), location of services (home visits versus center-based care), and extent of parental instruction are important determinants of the environmental quality of the program.

For instance, in Ireland, application for the establishment of Pre-school services requires to notify the institution of Health Service Executive (HSE) for inspection before starting the service. If an applicant fails to notify the HSE, the applicant will therefore be forwarded to local Pre-School Inspector. A service which prosecuted by the mentioned institutions, it may not be admitted as a program for pre scholars. Where these circumstances apply to a service already in operation, the contract may be terminated.

In the Netherlands also, all children are provided with free preventative health care services. For ages 0 – 4, nurses and doctors provide health care services either in preschools, or via home-care programs, or within private, not-for-profit foundations. Records on a child's pre-school health care (including developmental and psychosocial in addition to physical health) are transferred at the parents' permission to the child's school at 4-5 years. The main challenge on integration of health programs in ECCE within the region is on lack of formal method for sharing student health records across the preschool to primary school transition, W. Steven Barnett (2005).

In Canada, ECCE programs historical based on child care and preschool

service provision. The programs began from the opening of first infant schools in nineteenth century to the revival of interest in early care and education in mid-1960s. The aim had been to further the understanding of current developments in programs and policies by reviewing their evolution over the past 150 years.

To-date, through a number of reforms such as Investigating Quality (IQ) in Early Childhood Education and Care Program, Canada has successfully achieved the general implementation of ECCE programs. These have been possible through applying collective measures of implementation of set guidelines and strategies for ECCE programs', supervised by the University of Victoria. The collective measure involves personnel and instructors from the higher learning institutions and college, government officials, policy-makers and early childhood educators.

The primary strategy for promoting environmental quality of ECCE programs has been through reinforcing standard group size, adult-child ratios, training levels of caregivers, as well as 'best practices' that promote developmental outcomes, literacy, numeracy, and school preparedness in young children. This strategy has broadened and deepened discussions and effectiveness in quality of health of enrolled children within the ECCE programs in Canada and the large part of North America.

In Malaysia, Early Childhood Care and Education (ECCE) is divided into two age groups; 0-4 years and 4-6 years old. The first group (0-4 years), is under the Ministry of Women, Family and Community Development (MWFCD) which coordinates national programmes on the growth and development of children. The MWFCD also keeps a register of all childcare centres in the country. The second group (4-6 years) Pre-school education is under three different ministries/agencies, the Ministry of Education, the Ministry of Rural and Regional Development, and the National Unity Department.

The country insists on provision of appropriate facilities for the children as a core national condition for ECCE environmental standard for child healthy learning. The kindergarten must be clean and spacious place: with a warm, loving and caring environment for children. It must have both outdoor and indoor play facilities for

children.

Similar to the USA and Ireland, the premise of the childcare centre must also fulfil the requirements of the local authorities, observe the *health guidelines* as set out by the Health Department and fire safety rules as stipulated by the Fire and Rescue Department. Moreover, fire and evacuation drills are to be carried out once every three months.

Child Minders are responsible in running the programs; these are referred as a Pre School teacher in other countries. The Minders must be qualified: warm and caring personnel. In Malaysia, a school supervisor is not considered as a child minder. According to the country's Childcare Centre (Institution Based) Regulation 1985 (Amendment 1993), a child minder should be at least 18 years of age and must have attended the basic child care course approved by the Department of Social Welfare within one year of being employed at the childcare centre.

1.5 Africa and the Sub-Sahara overview on the ECCE Programs Environmental Conditions.

In reference to EFA Global Monitoring Report (2005); the Sub Saharan Africa has grouped the ECCE Environmental qualities into three categories:

The physical environment and infrastructure: Adequate space - indoor and outdoor - for children and teachers, lighting, ventilation, heating, functioning toilets, washing and cooking facilities, safety precautions, sufficient and appropriate equipment in good repair; sufficient toys, books and materials.

Quality of the staff: ECCE staff must be of a good level of education, well-trained in ECCE knowledge competence with good motivation and low turnover; good communication skills that includes listening; must have an opportunities for continuous training and professional growth at a maximum level; and also warm and responsive interactive to both caregivers/teachers and children.

Quality of how ECCE is organized and managed (programmatic overview: the ECCE programs require to have efficient administrative procedures; a curriculum or programme approach with clear goals, that is proven, covers diverse areas or dimensions of development and is integral; small numbers of children per class and per caregiver; equitable treatment for all children; activities that are pertinent and culturally appropriate; activities that cover multiple dimensions of learning and development and encourage reasoning and problem solving; frequent supervision and accompaniment; continuous evaluation and monitoring of programme and children; consistency in discipline and responsiveness.

The report went further by insisting environmental character of reinforcing the relationship between the ECCE programme and its immediate environment; the parents and community. This is in order to insure continuous communication with parents about children's progress and active parental involvement in school activities.

Like the developed countries, assessment of set standards of the defined quality of environmental conditions of ECCE programs in the region is currently determined

through the use of Early Childhood Environmental Rating Scale (ECERS); mostly applied in African countries, including Kenya and South Africa.

The following details illustrate the overview of defined ECCE environmental standard conditions at a country level within the African region.

In South Africa, the country's situation of ECCE programs is well established with very clear foundation. South Africa has in place *Act Guide for Children and Youth Care workers, National Child Protection Register (NCPR), and a special formulated registry with particulars of personnel and existing ECD programs.* Also *the Court and Judicial tribunal systems* have been given mandate to interfere any matter concerning the welfare of a child especially in the day care setting and operations. On the other hand the *Country's constitutional document* upholds the existing child acts in the country.

All of these guidelines are powerful mechanisms for ensuring that the national environment standards for the established ECCE programs are implemented to insure healthy learning of enrolled children.

Inspection and quality assurance of the ECD programs is also taken into consideration. The registered ECD programs undergo inspections two years soon after programs' registering. This work is done by specific identified agent, the Head of Social Development (HSD). If the authority is not impressed with the quality and standard operation of inspected ECCE program, registered serviced will be closed or penalized.

Through the defined procedure therefore, the conditions of all ECD, including the ECCE programs in South Africa are in a very conducive state favourable for the healthy learning of enrolled children.

In Botswana, the country ECCE Status Review report (2008) shows a positive progress on the quality and standard of ECCE programs' implementation. The report redefines eight major categories for determining Standards of any ECCE Services in the country. These are: Registration policy and licensing procedure, Admissions criteria, Employment and Welfare policies, Physical Structures, Transport

and Safety provisions, Health and Sanitation standards, provision of Meals and Curriculum adaptation.

With admission procedure: head of ECCE centres in Botswana are required to request for information on children: *Age, Gender, Religion, Parent's contact information and Medical History*. This is applied to all children who aim at being enrolled to ECCE programs.

Moreover, Botswana has in place the Early Childhood Care and Education (ECCE) Policy document (2001) that also help in specifying indicators of measuring programs' qualities. These indicators focus on standard of ECCE buildings, furniture, outdoor and indoor equipments, kitchen storage space and a sickbay.

The Republic of Zambia reflects the situation of ECCE programs in most of the Sub-Sahara African Countries. The country's government and development partner reports on ECCE programs detailed that, *home-based pre-schools in urban areas have mushroomed without taking keen interest in ensuring inadequate environmental conditions for the healthy development of children.* Therefore, the quality of most of introduced ECCE programs were very poor (learning and inputs were grossly inadequate) while the process of promoting child development in all areas within the country were deficient, with very low output standard. Preschool curricula are also outdated and inadequate for the age group, and *the environment is not conducive to learning*. Moreover contribution of local Government to preschool is also minimal since the running costs of these centres are met from fees collected from the children.

Starting early 2000s, positive development and supervision of the programs began to emerge. The *Zambia Early Childhood Development Program country report (2004),* clearly details that, during that period the Ministry of Education in Zambian was given mandate by the Government to oversee the operations of Early Childhood Development programs in the country. The Ministry was also responsible in overseeing the establishment of early childhood programmes for children living in rural and poor urban areas, pre-school teachers' trainings, monitoring of ECCE standards, and preparation of curriculum guidelines in all introduced ECCE programs in the country. Furthermore, through support from the Ministry, ECCDE

programs in Zambia were incorporated into country's National Development Plan 2006-2010; where by the ECCDE programs became an integral part of basic education especially in the rural areas, with a focus to 3-6 years old children, not on the age group 0-2 years.

Apart from the government interventions to the programs, the private sector through Early Childhood Care and Development Foundation (ECCDF) and Christian Children's Fund (CCF) are also defined as key implementers of ECCD in Zambia. The main role of ECCDF had been to mobilise, educate and empower parents/ caregivers in life saving and income generating skills; and also to raise government awareness to its obligations to the Convention on the Rights of the Child. Additionally, since 2002 UNICEF also began to assist MECCDF in establishing social programmes that aim at providing necessary support to child and care givers: and also disseminating information on ECCD to policy makers, planners and the public generally.

All these efforts together intend to insure secured environmental conditions of the ECCE programs for the general wellbeing of children development in Zambia.

In Kenya, report on conducted research on *situation analysis of implementation of strategy for ECD policy framework and ECD service standard guidelines in Kenya* (Abagi 2008) shows that, there were about 37,000 registered (public and private) ECDE centers in the country. The enrolment of children in pre-primary education varies greatly in various communities across the country, but lowest in disadvantaged communities and urban slums. These two areas are where parents and communities have limited capacity and motivation to invest in their young children's development and education. Through the Kenya Central Bureau of Statistics, the report estimated that, by 2010, the 0-3 year olds and 4-5 year olds could be 5,335,460 and 2,504,110 respectively.

Kenya ECCD case study report, (1993) went further to shown the historical development of preschools in Kenya, in the 1940s: where Pre-schools saved the purpose of the European and Asian communities. Later in late 1950's, the programs developed in urban areas and on colonial cash crops plantation areas

where Africans were locations. After independence preschool education expanded throughout the country through the *Harambee* or self-help spirit; which meant, when a community defines a need, it creates a programme to meet that need. The demand for preschools for African children (3-6 years of age) resulted the mushrooming of early childhood care and education programmes (ECCE) to all social, economic, cultural and geographic groups in Kenya.

Ministries involved in preschool provision are the Ministry of Health, the Ministry of Culture and Social Services and the Ministry of Education. External partners have been and continue to be important to facilitate the development ECCE programs in Kenya: such as Bernard van Leer Foundation, the Aga Khan Foundation, and UNICEF.

The administration proceedings of Preschools were previously under the *Ministry of Culture and Social services.* In 1980 the Ministry's roles were *shifted to the Ministry of Education (MOE)* which then became responsible in the formulation of policy guidelines for early childhood programmes, registration of preschools, coordination of government grants and funds from external donors, and provision of early childhood personnel at all levels. Decentralization of government affairs to the district level in 1983 also resulted the governments to take main responsibility for on-going support of preschool education in the country.

During 1991, through the Bernard van Leer Foundation, Kenya began the assessment Preschool Education Project: with the objective of *improving the quality of preschool education*. Report from that Assessment Project then recommended on a need for establishing National Centre for Early Childhood Education (NACECE) and District Centres for Early Childhood Education (DICECE) which then formally introduced in 1984 and 1985.

DICECE supervised *the environmental qualities of ECCE programs*: including, *equipped teachers and trainers with knowledge and skills to provide quality services to children, trained responsible personnel at the district level; supervised and inspected district preschool programmes; and the mobilized local communities to care, health, nutrition and education of young children.*

NACECE focused on provision of capacity building programs to ECCE personnel; ECCE programmes curricula developing and disseminating; overseeing research activities for ECCE; and coordination of program networking activities.

Health component of the programs is also assured by, the NACECE/DICECE through adaptation of a holistic approach to support child development. That means *all health, nutrition, growth monitoring and promotion and educational activities are integrated to the programme.*

Kenya compared to other Sub Saharan countries; has a unique policy of encouraging partnerships, at all levels. Parents and local communities are the most important partners. The two partners started and currently manage over 75% of the preschools in the country. Parents provide funds, furniture, materials, labour and also pay teacher's salary. In some communities, parents prepare food ingredients as a nutritional support program to the enrolled children.

1.6 Tanzania overview on the Early Childhood Care and Education (ECCE) Programs' Environmental Conditions.

The introduction of ECCE programs in Tanzania originated from similar colonial context similar to that of Kenya, but with the aim of serving a different purpose. In colonial Tanzania, these programs were initiated by the religious organizations and minority racial groups (Seif, 1987). These included bush schools, madrassa (Quran schools), nursery schools, kindergartens and day care centers: however, they were very few due to the weak position of religious/racial group's organizations.

The colonial government on its part introduced ECCE and ECD programs with the establishment of the Social Welfare Division in 1946 which dealt with "problem" cases such as probation of young offenders, social guidance and counseling of families and individuals, child welfare (day care, orphanages etc), destitute care (aged and poor persons), -and handicapped persons and children (Omari, 1973: 112). The normal children below the minimum age of 7 years were not entitled to this form of education.

After independence in 1961, there was some pressure from few parents for pre-school education of their children. The reasons given for pre-school education were growth of towns and disruption of communal child rearing practices, working mothers, development of modern technologies and the appearance of nuclear families. Later on the development of Ujamaa villages after 1967 required that women should be freed and participates fully in economic production in the new villages. The expansion of primary education in the country also meant that the older children would not be at home taking care of their young brothers or sisters. At the same time some parents looked at pre-school education as a good preparation for formal schooling. This would enable them to do better in the primary school and secure a place in a secondary school.

With encountered country developmental changes, the National Child Policy document therefore shows that, during 1996, 46% of the general population in Tanzania were children, which is a large proportion of the National population. With that regard, Tanzania education system was enforced to divide from pre-primary

education to the tertiary education. (Currently the Pre-primary education aim for children below 5 years of age).

The Policy document went further to specify that, apart from effort made in safe guild child health and welfare in Tanzania since the colonial to post-colonial era; still child welfare and health development situation in the country is not yet promising. Not only that, existing literature in Tanzania also details that, the introduced ECCE programs in rescuing child situation has shown very little causal relationship between the under-five child health and schooling; ECD programs were not effective before liberalization of economies and also the environmental conditions of established ECD programs were defined to be among underlying contributory factors which contribute to under-five health challenges in the country (National Child Development Policy, 1996).

The general physical condition of established ECCE Programs (pre-schools and day care centers) in the country characterized following standards: *lack of safe and clean water, poor physical condition and sanitation of centers/schools, poor health services management for children attending ECD programs specifically the ECCE (such as lack of proper care, immunization strategies, poor nutrition services and lack of health personnel),* lack of community awareness to existing child rights, high level of poverty, above all the categorization in difference and attentions in development among 1-5 year old child needs were taken for granted by very few in the society.

In addition to that, study on investigating the situation of ECCE Programs in Temeke Municipality, identified problem areas that needed to be solved in order to promote general accessibility and raising quality of ECCE programs in the Municipality and the country at large (Kweka, A.N. and E. Binagi (1998)). Through survey and field work research; six out of 16 wards in the Municipality were visited; the local government leaders, educators, NGOs, pre-school teachers, owners/managers and parents were also interviewed as part of the study.

Moreover, through that study, a concept of early childhood education within the context of Tanzania and the situation of early childhood formal and non- formal

education in Temeke District were analysed and assessed.

The study recommended the need for a clear policy on pre-school education; increase in enrolments because about 60% of children enrolled in Std. one in Temeke District did not go through pre-schools; three selected rural wards had no pre-schools programs at all; also government to provide an enabling environment for the registration of pre-schools especially in providing monitoring, supervisory services to all pre-schools and train inspectors for pre-primary education. The report also recommended on a need for adequate teacher training in pre-school education: the short course training for three months or less was not adequate for pre-school teachers. Most importantly is on an urgent need to study all institutions providing pre-school teacher training in Tanzania to scrutinize the curriculum and find out existing problems in order to suggest ways of improving the quality of pre-school education in the country (Kweka, A.N. and E. Binagi 1998).

Unlike Kenya, the Ministry of Education and Culture in Tanzania was hesitant to register ECCE programs as a form of education system as regard to cultures and practices of the country. The terms "Day Care Centres" and "Nursery Schools" were being used interchangeably by most people to refer to educative programs for children between 3 and 6 years of age.

Through the World Summit for children (1990), like other developing Sub Sahara African countries, Tanzania responded to a resolution of 'First Call for Children'. As in result to that, since 1990's the country then begun to be guided by cited National Child Development Policy document which helped in setting and allocating priorities and resources for the general welfare of a children.

- **Strategies used to overcome child welfare and health challenges in Tanzania**

Child welfare and health challenges in Tanzania triggered the country to set number of priorities to address child situation. Among the prioritized strategies include continuing *Preventive Health, Environmental and Sanitation campaigns, and continuing establishment and strengthening of Feeding posts, Day Care Centers and*

the Pre- Schools (ECCE Programs) (National Child Development Policy, 1996).

The Ministry of Health and Social Welfare was then given mandate to coordinate and supervise all ECD (including ECCE programs) Programming.

Through responsible committee coordinating ECCE program at the national-Ministerial- level -Mr. Lomitu- reported that, since year 2010, Tanzania decided to introduce a joint coordinating committee made by permanent secretaries of four main Ministries responsible for child development programs. These included the Ministry of Gender, Community Development and Children (focus on issues relating to general childhood development): Ministry of Education (specific for interlinking childhood education programs): the Ministry of Health and Social Welfare (coordinating the ECD and ECCE programs): and the Ministry of Regional Administration and Local Government Authorities (provide supervision of ECD/ECCE programs at a local level).

The joint coordinating committee has shown effectiveness in supervising the implementation of ECCE programs based on national ECCE standards. In few pilot Municipalities, the committee members including the District and Ward Social Welfare officers are re-assessing ECCE programs and penalize all the operating ECCE programs that operate below defined national standards.
The government through the committees has also insisted that, Day care and Pre-school services (ECCE Programs) must put emphasis on health and welfare for children to cover areas on, vaccination, child nutrition, health care and care of children with special needs.

The ECD/ ECCE programs' national coordinators are currently receiving trainings on monitoring and evaluation skills on ECD/ECCE implementation in Tanzanian. The program is supported by the government in partnership with UNICEF Tanzania. The same trainings intend to be a continuous program with the aim of reaching owners and implementers of ECCE programs at the local level. At the same time the committee has also begun to develop curriculum for ECD institutions and train Pre-primary school teachers. Also a guiding documents and user friendly manuals for ECD implementers are also available at the LGA offices.

Moreover, the UNESCO World Survey of Education annual reports descriptions on "pre-primary education" statistics assist Tanzania in obtaining "indicators" of ECCE progress-country wise. It is therefore assumed that 100% coverage of set condition standards is the ideal coverage.

2. CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Global overview on ECCE programs' environmental conditions for children healthy learning.

The early age child health is an important policy issue in both high and low-income countries because of the wide ranging impact that early childhood health is thought to have on the subsequent development potential of the individual. This is the fact which triggers the development of many childhood developmental programs at different geographical demarcation in the world. Some of these introduced programs included the ECCE program, with the focus on enhancing intellectual, educational, spiritual, socio-cultural and health development of the early age child.

The ECCE Programs are special programs for the under-five age groups, which varies on level of programmatic implementations based on country's level of development in relation to its social-political and cultural backgrounds. Apart from countries variations on the level of ECCE programs' implementations, the United Nation (UN) has specified global standard indicators for ECCE implementation which is expected to be followed –worldwide- by member countries that engage in ECCE programing.

As a response to the mushrooming of ECCE programs, United Nations delegated part of its mandatory power to one of its agency, UNESCO. The agency is responsible in governing global trend and development of Education systems, including that of ECCE programs. Through UNESCO, coordination and supervision of ECCE Programs around the globe is enhanced effectively.

Moreover, the Moscow Framework for Action report (Nicholas Burnett, 2010), detail that UNESCO also has set special indicators in measuring trend and standards of implementation of ECCE programs in the world. Each member state ratified to UN conventions, including Tanzania is abridged to these set standards. Additionally, information on trend of level of implementation of these standards is annually reported by the machinery through annual World Survey on Education.

At the moment the surveys' statistics are only limited to formally organised programmes.

The following are UNESCO global indicators that are used in assessing the ECCE Programs' environmental conditions that directly affect health of children enrolled to ECCE programs:

2.1.1. Physical Environmental conditions

i. Range of availability of clean water (running water)
ii. Level of safeness of the play ground
iii. Level of general environment cleanliness of on the school/ centre
iv. Level of cleanliness and safeness of toilets used by children
v. Size of windows for ventilation in classrooms.
vi. Percentage of safeness of learning materials in used by children in the classes
vii. Number of enrolled children as per the class size

2.1.2. Programmatic overview (program implementations and integrated activities)

i. Ratio of child/ teacher or care giver
ii. Total number of teacher per each class as according to the age category of the children
iii. Percentage of the enrolled children as referring to the required children/ teacher or care givers ratio
iv. Number of integrated programs relating to health development of a child.

2.1.3. Level of competence of the enrolled teachers/care takers to the program

i. Rate of trained qualified personnel to implement child development activities
ii. Rate of regular punctual teacher attendance
iii. Level of maintaining child records
iv. Rate of time spent by teacher to engage with child's activities
v. Percentage of professional support/ supervision of teacher to a child in need
vi. Rate of regular child monitoring as regarding to defined ill health
vii. Level of mutual respect (teacher-child, child- teacher)
viii. Percentage of application of participatory learning strategy
ix. Rate of attending trainings and refresher courses among teacher/ care taker

Each of the above indicator for ECCE standards, assume 100% as a maximum level of coverage.

Based on cultural and developmental dynamics, each country that implement ECCE programs is required to ratify to the above mentioned global UNESCO set standards indicators. This is in order to safe-guide child rights and best interest at the global level. The implementation of these standards is therefore mainstreamed country-wise in accordance to each country's level of development and cultural background.

2.1.4. Examples of global overview on the level of implementation of ECCE environmental standard conditions for children healthy learning.

The following paragraphs illustrate global overview on the level of implementation of ECCE standards in few countries that have reviewed the level of implementation of the set program standard.

Ireland is an example of European and Scandinavian countries that has a well-defined system and standards for early age enrolment to ECCE programs supported and supervised by the public sectors.
The class enrolment ratio is: 'Up to 11 children/1 pre-school leader', '12-22 children/1 pre-school leader and 1 pre-school assistant', '23-33 children/2 pre-school leaders and 1 pre-school assistant', '34-44 children/2 pre-school leaders and 2 pre-school assistants'. Moreover, for each maximum group size of up to 22 children in an ECCE setting there must be at least 1 pre-school leader who meets the qualification (i.e. minimum NFQ Level 5 or equivalent).
The class space/area requirement per child is 1.818m2, which must base on defined class ratio basing on age group of a child.
The ECCE programs' sanitary arrangements are such that for every 11 toilet-using children there must be 1 toilet and 1 wash hand basin.

In USA, the implementation of ECCE standards is similar to that of the Europe and Scandinavian countries except on the children/teacher ratio. The number of Pre-school leaders required in USA is determined by the adult/child ratios set, either

seasonal or full day modal. For seasonal model, the ratio is- *'10 children/1 Pre-school leader'*, *'20 children/1'Pre-school leader and 1 assistant'*. With the Full day care model – *'8 children/1 Pre-school leader', '16 children/1 Pre-school leader and 1 assistant'* and *'16 children/ 1 Pre-school leader. The Pre-school leaders* require to be personnel who meet the qualification requirements (i.e. minimum FETAC Level 5 or equivalent)or at least who meets required qualification.

In Malaysia, the class ratio between Child/Child Minder is defined as 'below 3 years 5/1' and 'between 3-4 years 10/1'. The ideal class-size is between 12 to 15 children with one teacher and one assistant, in order to accommodate the open communication process of learning. Small-sized classes will allow more communication between teacher and children and more opportunities for children to speak.

The ECCE programs should also have 1 toilet for every 10 children at the premise specifically for their use, and appropriate playing equipment that is safe and well maintained. There should also be appropriate menu and daily activity plan according to the different age groups of the children visible to all on the childcare centre's notice board. The certificate of registration for operation should also be displayed.

Every licensed childcare centre must have 1 fire extinguisher, 1 first aid kit, and an evacuation plan in case of fire.

Generally, the level of adherence to the set national standards for ECD and ECCE programs' in developed countries is very high. This is due to the level of law enforcement to all ECCE programs' actors, in order to insure health and welfare development of children in the developed world, specific to each country of practice.

2.2 Overview of ECCE programs' environmental conditions for children healthy learning in Africa.

The ECCE programmes status review report, Kabita Bose (2008), assist in depicting general situation of ECCE programs environmental condition for early age enrolment in Botswana. The survey report involved 40 ECCE centres (50%) in Gaboron; and 40 Heads of each sampled centre. Results from the study revealed the following:

Around 39 (97.5%) of ECCE centres were registered and had procured license to run their centres and renewed it on a yearly basis. All 40 centres (100%) had been inspected, 19 (47.5%) were inspected yearly and the remain 21 were inspected either every term or about 2 to 4 times a year. This means the important tool for monitoring and evaluating Standards in ECCE was utilized for regulation and maintenance of standards as stipulated by the country's policy document (Kabita Botse, 2008). Almost half of the total studied programs, that is, 19 (47.5%) were run privately as Day-care and Pre-primary services. Only 9 (22.5%) of these catered to children ranged from 0 - 2.5yrs; this reveal the fact that ECCE programs for babies below 2.5 years are very scarce in Botswana. The remaining half of the studied programs comprised of mainly the NGOs, Pre-Primary and Faith Based centres. Centres like Union/Council, community based and Orphan Care were very few (Saluja et al., 2002). The results also showed that, despite today's era of HIV/AIDs, only 10 (25%) catered for OVCs.

A class size ratio is one of the structural features of early childhood education in Botswana. National Association for the Education of Young Children (NAEYC) recommends a child/ staff ratio of 8 children per 1 staff for children of 3 year olds, and 10 children per 1 staff member for 4 year olds children Kabita Bose (2008). The public school had the most favourable child to staff ratio (8:1) while profit programs had 10:1, (Saluja et al., 2002).

Out of 40 Heads of the centres, 95% were females and only 17 (42.5%) subjects were falling between 20 years to 39 years of age while the rest were ranging from 40 years to 60 years and above. The highest concentration was in the age range of 40 to 50 year olds. This large number of females as heads of ECCE programmes is a common

scenario the world over, as a few males are found in the field of early childhood care and education. 38 (95%) of the heads were qualified and almost 15 (37.5%) of them were degree holders, the rest were either holding a certificate or a diploma.

With the ECCE environmental condition necessary for the healthy development of children, the Botswana's economy empowered owners of the ECCE centres to provide necessary physical structures and maintain a quality for the healthy development of enrolled children. The study revealed that more than 75% of centres had a specially constructed building, an administrative office, sickbay, child sized toilets and basins and all of them provided child-size furniture. Except for one VDC school, all had Outdoor Play area with Slides, swings, seesaw, sand bay, scooters, balls, bicycles, jungle gym, play house, swings, water tables, hoola hoops, and climbing frames. Except for one faith-based centre, all had *a kitchen and storage space and 32 (80%) centres provided meals regularly*. While one cannot guarantee the nutritional value of the meals served, it is however encouraging observing that majority of children are at least being fed.

Basing on the defined indicators in measuring standard and quality of ECCE centres, the Botswana's ECCE situation shows best attempt to adhere to certain standards and regulations laid down by the national and global strategies for health and wellbeing of a child development.

In Kenya, report on *ECD situation analysis in Kenya* (Abagi 2008), revealed that most of the ECDE centres, particular public and community owned in, do not meet the National Early Childhood Development Service Standard and Guidelines.

The study involved 181 ECD centres in six provinces of Kenya; 116 public, 39 private and 26 community/religious institutions.

In relation to ECDE Centres infrastructure (classrooms, sanitary facilities and play equipment), most of the centres were squeezed (less than 8 x 6 metres) and dilapidated. In Rift Valley Province 60% of the observed ECDE centres classrooms were in bad state (small, dusty, bad floors, poor ventilation); 39% in Coast; 38% in Nyanza; 30% in Nairobi; 23% in Central and 15% in North Eastern/ASAL region.

The centres also had no fence and there were footpaths through the facilities' compounds.

The lack of adequate sanitary facilities (toilets and water) was a major health hazard in the majority of ECDE centres. The studied public schools have limited or no playground and learning equipment's. About 80% of the school compounds and physical environments did not look good and attractive for small children in ECDE. About 99 per cent of all the public /community ECDE Centres shared toilet facilities with primary schools. Besides, such facilities were located about 200 metres from an ECDE classroom. On the other hand, the situation was different in rich communities of Nairobi and Coast Provinces whereby, over 50% of ECDE in these areas had available and accessible water facility to ECDE children (in the form of tape water or water storage tank).

Ninety percent of the studied programs demonstrated very poor adherence to Service Standard Guidelines (compound free of sharp objects, fencing the compound/lockable gates, compound adapted for children with special needs). This is because the majority of parents are not ready to mobilize additional resources to support ECDE centres.

With integrated health programs, safety and protection standards in the majority of ECDE centres across the districts for children 3-5 years old were very low. No public and community ECDE centres visited had fire fighting equipment, a first aid kit, and almost 95% of the ECDE centres had no fence and a lockable gate. Moreover, over 90% of public/community ECDE centres which operated on full day basis had no sleeping facilities.

Health and hygiene services offered to ECDE children at the centres visited was very minimal or none existent, in public and community centres in particular. In most public schools, deworming and immunization follow-ups were done at least once a year. Growth Monitoring Promotion Program (GMPP) was not known to many ECDE teachers and there were no proper health records. On the other-hand, health conditions in high cost private ECDE centres like Aga Khan in Kisumu observed to be good and up to standard. They had established a health unit, equipped with basic

drugs and facilities, for emergency incidences.

The nutrition support program report show that, about 95% of parents do not pack any food for their children when they are going to school. This is due to poverty/lack of food at home except for most private ECDE centres where there is formal feeding program comprising a balanced diet (enriched porridge, beans, rice, meat, fruit), such a program is expensive and is optional.

The rate of trained qualified teachers was 44% holders of ECDE Certificate and Diploma while the number of untrained teachers increased marginally from 21,928 in 2006 to 22,147 in 2007. The pupil-teacher ratio nationally stood at 22.1:1 in 2007 majority of them had limited capacity to embrace a holistic and integrated view of early childhood services. ECDE managers/teachers in all the districts were reported to be unable to observe all basic hygiene including making sure those classrooms and the surroundings are clean, the ventilation is adequate, sanitary facilities are available and clean and children themselves are clean including their uniforms.

Generally, the ECCE environments condition in majority of poor communities in Kenya were in a very poor condition, not safe and not suitable for the health development of the under-five children. The environment was also with unsatisfactory and un-stimulating to learning for children with individual needs. The report went further to detail that, not much was being done by parents and communities across the Kenya to make the classrooms, toilets/latrines and out-door space safe for young children as required by the ECD standards.

2.3 Overview of ECCE programs' environmental conditions for children healthy learning in Tanzania.

Tanzania implements its developmental programs based on the existing global and national policies and strategies on child development. However the integration of these global policies takes into account on national environment situation in order to abide with country's social, economic, cultural and political dynamics.

Basing on encountered ECD/ECCE challenges, the country has currently introduced number of strategies which aim at fostering holistic approach to childhood programs. Some of these are the strategy on integrating policies that ensure effective implementation of ECCE programs within the Ministries that oversee childhood development programs.

Through implemented reforms, the country has come up with a guiding document for ECCE implementations standards. This is in order to ensure healthy learning environment for children enrolled to the programs. Owners and implementers of ECCE program in the country are required to adhere to the set standards that assume 100% as a maximum level of coverage (shown in Annex 1.).

The following data also depict the general picture of ECCE program's situation in Dar es Salaam region. Leach, V. 1995.

Characteristics	**Government**	**Non-Government Registered**
Total number of ECCEs	149	74
Total Enrolment	4,053	2,880
Total number of teacher	98	184
Teacher/ pupil ratio	1/41	1/16

With that fact therefore, monitoring and tracking of ECCE programs' implementations remain to be of great importance. This is in order to review on the level of adherence of both global and national set conditions, and their impact to healthy development of the enrolled children to ECCE programs.

Finally, this research work aimed at assessing the level of adherence to global and national standards in ECCE programs in Kinondoni Municipality, Dar es Salaam.

2.4 Problem Statement

Regarding the above information on the overview of Environmental Conditions affecting child health in ECCE programs in Tanzania; the country's attentions for the past ten years was directed towards reforming the existed child development programs specifically the ECD and ECCE programs. This is to say, through the guidance from both global and national child development policies and strategies, the facilitation for better implementation of the ECCE in relation to child development process were encouraged and started to take a different scenario.

However apart from this vast array of possibilities for more effective ECCE development process, still information on poor environmental conditions of ECCE programs that have a direct effect to the health development of the enrolled children to ECCE programs continues be reported. (Colin K, 2011).

On the other hand, in spite of the mushrooming of early childhood education in Tanzania, still very few studies were done in the area of ECCE, most of which focused on comprehensive study of the program with a little glance on health impact of the programs' infrastructures to health of the enrolled children.

A study done in Temeke Municipality, by Kweka, A.N. and E. Binagi (1998), recommended a need for more studies with the aim of monitoring and supervising ECCE services, and also a need for training special Cadre of pre-primary education inspectors. By the time when this study was conceived, none of similar study in Kinondoni Municipality had beem reported or published.

This study therefore aimed at assessing the level of adherence in implementation of national Early Childhood Care and Education (ECCE) standards in registered ECCE programs in Kinondoni Municipality Dar Es Salaam, Tanzania

2.5 Rational

Reducing Maternal, new-born and child mortality is a great challenge of the on-going Millennium. It has been reported that, each year in Sub Saharan Africa (including Tanzania) 4.5 million children die before their first birthday while 1.2 million of them die in the first month of life (UNESCO, 2010). Global effort helped in addressing these challenge by enforcing nation that ratify to UN convention to effectively strategies to abide with the global policies; such as the MDGs.

As specific to the under-five health challenges, the MDG Number 4 requires countries to reduce the under-five mortality rate by two thirds by 2015. The designed Tanzania Vision 2025 and the NSGRP, help in effectively effect the defined MGD goal at the national level. In detail, the cluster 2 of NSGRP: aim at improving quality of life and social well-being, whereby its goal number two specifically focus on improving survival, health and well-being of all children and women. Goal number three also of the same cluster aim at increasing access to clean, affordable and safe water, sanitation, decent shelter and a safe and sustainable environment.

The establishment and strengthening of Feeding posts, Day Care Centers and the Pre Schools, Immunization and Preventive Health, Environmental and Sanitation campaigns is also among the set national priority in addressing child health care and development challenges in the country.

This study therefore assesses the adherence level of ECCE programs in Kinondoni Municipality to the set global and national ECCE standards. As referring to ECCE Program report in Temeke Municipality (Kweka, A.N. and E. Binagi 1998); the implementation level of ECCE standards in Dar es Salaam was poorly implemented; specifically on physical and programmatic status (toilets, classrooms and playgrounds, ventilation and sanitation, water supply, children/ teacher ratio; and teachers' knowledge competence.

This study then focuses on the set standards that have a direct impact to the under-five child health. The study will also provide baseline information to the Municipality, especially on how the implementation level of ECCE standards contributes in affecting the under-five child health in the Municipality and the country at large.

2.6 Objectives

2.6.1. Broad Objective

To assess the level of implementation of national Early Childhood Care and Education (ECCE) standards in registered ECCE programs in Kinondoni Municipality Dar Es Salaam, Tanzania.

2.6.2. Specific Objectives

i. To describe the physical environment of the ECCE Programs in respect to required standards affecting health of the enrolled early age children to the program.
ii. To determine knowledge competence of personnel coordinating child activities in ECCE Programs.
iii. To identify the health risk screening strategy used in identifying child medical/ health history during time of enrolment to the programs.

3. CHAPTER THREE

3.0. METHODOLOGY

3.1. Description of Study Area

Dar es Salaam region, Kinondoni Municipality: where there was the mushrooming of registered and unregistered ECCE programs.

The region was established in 1973; currently defined with three main Municipalities namely Ilala, Kinondoni and Temeke. The region lies along the Western Coast of the Indian Ocean, situated between 6 and 7 degrees South of the Equator, between longitudes 33.33 and 39 degrees East of Greenwich. It is also borders with the Coast Region in the North, West and South; and the Indian Ocean to the East. The total surface area of the Region is 1,397 square kilometers, equivalent to 0.15 percent of the entire Tanzania Mainland area.

- The Kinondoni Municipality then, is in the northern part of the region, occupies 531 km² area of the region with 1,083,913 inhabitants (National Census2002.) Administratively, the Municipality is divided into 10 Divisions; 27 wards; 93 sub-wards; 448 streets and 8 constituencies. The original inhabitants of the Municipality were Zaramo and Ndengereko, but due to urbanization the Kinondoni has become multi-ethnic.

The reason for selecting the urban setting Municipality for this study was due to the originality in the development of ECCE programs in Tanzania. Since 1961, parents in urban areas where colonial activities took place, engineered the process for pre-school education for their children due to; disrupted communal child rearing practices, working mothers and the appearance of nuclear families.

Moreover, reports in the Municipality showed that, until the time when this study was conducted, few programs in only 4 Wards (Hananasifu, Sinza A/C and Makumbusho) out of 27 wards in the Municipality were assessed based on set national standards for ECCE programs' implementation. The conditions of these few assessed programs were defined to be not appealing for development of enrolled children to the programs: the fact which triggers a need for further study in assessing the level of implementation of national standards guiding ECCE Programs implementations for the health of under-five children within the Municipality.

3.2. Study design Type

Cross-Sectional Quantitative Research

3.3. Study Population

The study population was the teachers from Pre-school/ kindergarten/ Day care centers, the Local Authority Officer and central government officers coordinating or administering the ECE Program.

3.3.1. Study Units/Clusters

Day care centers, Pre-schools, Nursery schools located in Kinondoni Municipality and the responsible government departments for ECCE programs. All certified 52 ECCE program were identified as the units/clusters to this study of which 28 ECCE programs were among the identified list of ECCE programs obtained at the Municipal office. The remained 34 units were obtained at the Ward offices through a LGA social welfare officer at the ward level.

3.3.2. Sample Population

The total number of study population was 155. Of which 152 of a sample population were ECCE Program school teachers. In addition 1 Local Government Authority (LGA) Officer and 1 central government officers coordinating or administering the ECE Program: and 1 more personnel coordinating non-governmental network for children program at the District level were also included.

3.4. Sampling Technique:

- All certified ECCE programs registered by LGA programs' supervisors at both Municipal and ward level, were included to the study. The sample population (teachers) included all teachers found in all selected ECCEs in the Municipality.

3.5. Data Collection Instruments

- An observation checklist with three main parts was used in collecting data on the general physical environment of the 52 ECCE Programs.
- Structured questionnaire in both Kiswahili and English languages were used to collect information from the respondents. The questionnaire was divided into

five main parts: Part A aimed at gathering the general information about the Program: Part B gathered the general awareness information on existing ECCE Standards: Part C gathered information for specific objective number two (Knowledge competence of health care personnel at the institutional level): Part D gathered information on specific objective number three (Screening program and First Aid services prevail in the main program): and part E aimed at collecting the general information on child health issues that were not included in the mentioned parts

- A list of guiding questions for in-depth interviews with the government officials at both central and local government level.

3.6. Recruitment and training of research assistants

Three research assistants were recruited and trained for four days consecutively to build skills on questionnaire administration.

3.7. Data collection Procedures

The team that was made up of three research assistants, and a Principall investigator began by visiting the Social welfare officer at the LGA Kinondoni Municipal office for rapo-utouring and receiving administrative guidance of the whole exercise from responsible officers within the district. A list of reassessed 28 ECCE programs in only two wards of Sinza and Hananasifu/ Kinondoni was then handled to the team for the continuation of the exercise.

Interviews to respondents and observation of ECCE Programs in all identified wards were carried out after introduction, reviewing eligibility criteria and informed consent obtained. The collected information was then filled in prepared questionnaires and checklists.

3.8. Criteria for Enrolment

To be enrolled to the study, the following criteria were to be met

i. The ECCE program must be located within the Kinondoni Municipality.
ii. The subject must be a teacher at the ECCE program or coordinator/ supervisor of ECCE program within the Kinondoni Municipality

3.9. Data Entry and Quality Assurance

The collected data was reviewed by the research team supervisor at the end of each two days. Also the principle investigator reviewed the gathered data daily to identify missing contents before continuation of the research exercise in the following day. Identified problems were addressed by the team members prior to days of data collection.

Quality assurance

The data entry procedure was purposely in insuring accuracy and completeness of the gathered data.

3.10. Data Analysis and Management

The analysis of gathered data was done through the use of Epi-Info program. However, the definition and analysis of all variables that used to measure excellence of ECCE programs' environmental condition were defined as according to set national standard values for ECCE programs' implementation. *Annexure I* help in defining the definition of value of each defined variable categorized.

3.11. Dissemination of Study Output

All identified issues from this study will first be disseminated to ECCE program teachers and caretakers and supervisors or coordinators at the local authority and networks working with ECCE programs in the district. The dissemination process will be done through a composed simple report with which will be handled to all units involved to this study.

At the national level, parties who took part in this study from the local to national level will assist in dissemination of study outputs during partners meeting focusing on ECD implementation in the country.

Not only that, the production of dissertation booklet will also be used to disseminate the obtained research findings to different stakeholders from local to national level.

Moreover, the result may also be disseminated to local and international partners working on ECCE programs implementation through publication of these results to the journals and conference dissemination meetings.

4. CHAPTER FOUR

4.0 RESULTS

All 52 ECCE programs identified by local authority officers within the Municipality were included in the study. The sample population of all 152 ECCE program teachers found in each identified ECCE programs in the Municipality were also interviewed. In addition two more samples of governmental officials' overseeing ECCE programs at central and local government level were also studied. This then marked a total sample of the study to be 154.

The social demographic characteristics of these teachers are showed in table number one.

Majority of these interviewed teachers (82%) were aware of general national ECCE Programs' Environmental Conditions in respect to required national standards for ECCE Programs' implementation. But unfortunately, high proportional of these 82% studied teachers were misinformed with specific *standards for children healthy learning* environment. Perhaps, this explains the essence of assessing the level of implementation of national ECCE standards in registered ECCE programs in respect to the health development of enrolled children to these programs.

Table 1: Demographic Characteristics of the Study Population

Variable	Number of teachers (N=152)	Percent (%)
Age group (years)		
19-24	21	14
25-29	58	38
30-34	37	24
35-39	15	10
40-44	11	7
45-Above	10	6
Sex		
Male	24	16
Female	128	84
Education level		
Non	32	21
Certificate level	95	63
Diploma certificate	23	15
Higher University Degree	2	1
Post held to school/centre (teacher/caretaker)		
Assistant teachers	34	22
Teachers	118	78

Table number 1 shows the demographic characteristics of the study population. Fifty two percent of studied teachers were aged between *25 to 34 years*;84% were *female;* and63% were certified. Only 21% of program teachers were un-qualified teachers with *'Non' academic qualification.*

On the other hand, the table also illustrate that, only six Percent and 7% of studied population is within 40 and above *'age group category'* and only 1% of studied population *'education category'* being at *higher education level.*

Table 2: Proportion of 52 ECCE programs by their level of implementation to specific physical environment condition for healthy learning.

	Proportion of ECCE Programs' implementation (%)		
ECCE Physical environment conditions	**Not available**	**Poor**	**Good**
Availability of clean water	14	39	47
Safety of play ground	37	20	43
Size of playground	37	19	44
School/centre environment cleanliness	2	37	61
Cleanliness and safeness of toilets in use by children	12	59	29
Size of windows proportion to required size for ventilation	2	34	64
Safety of learning materials	20	22	59
Number of children per class	15	52	35
Number of toilets in use to be more than two.	2	52	47

Table 2 shows the proportion of 52 ECCE programs by their level of implementation to each specific physical environment condition for healthy learning. Sixty four percent, 61% and 59% of ECCE programs respectively scored good in relation to *'size of windows for ventilation', 'school/ centre environmental cleanliness',* and *'safety of learning materials'*. Only 29% of studied ECCE programs scored good in relation to 'cleanliness' and 'safeness of toilets in use by children'. In relation to size and safety of playground,37% of all ECCE programs had no playground at all.

Table 3: Proportion of ECCE Programs that did not adhere to set standards on availability of, toilet exclusively for children; centre/ school/ structure being away from main roads/ public services; and teaching AID.

	Proportion of Programs that did not adhere to standard
Physical environmental standard conditions	**Percent (%)**
Availability of toilet exclusively for children	69
Availability of centre/ school/ structure being away from main roads, public services.	50
Availability of teaching AIDs	94

Table 3 shows the proportion of ECCE Programs that did not adhere to set standards on availability of toilet exclusively for children; centre/ school/ structure being away from main roads/ public services; and availability of teaching AID. Ninety four percent and 69% of ECCE programs respectively scored poorly in relation to '*availability of teaching AID'* and *'availability of toilets'.* In relation to *'location of centre/ school/ structure away from main roads, public services'* 50% of studied ECCE programs were located in safer locations.

Table 4: Number of teachers aware of national environmental standard conditions for children healthy learning in ECCE Programs.

	Level of Awareness	
Awareness status	**Numbers of teachers**	**Percent**
Aware	125	82
Not aware	27	18

Table 4 shows the number of teachers who were aware of national environmental standard conditions for children healthy learning in ECCE Programs**.** Out of 152 interviewed teachers, 125 (82%) were aware of set national standards on healthy environmental condition important for children learning to these programs.

Table 5: Frequency of teachers who are aware of each specific National environmental condition standards for children healthy learning.

	Frequency teachers who are aware	
Environmental conditions standards	**Number (N=125)**	**Percentage (%)**
Availability of qualified teachers	21	17
Availability of toilets	18	14
Availability of running water	4	3
Availability of classes/ enough classes	18	14
Availability of clean environment	30	24
Availability of playground/play accessories	20	16
Availability of sanitation	7	7
Availability of ventilation	4	3
Availability of First Aid Kit.	3	2

Table 5 illustrate frequency of 125 teachers who are aware of each specific National environmental condition standards for children healthy learning. It is unfortunate that, all the environment standard condition for child healthy learning were known by teachers at a very low rate. The known healthy standards were 'availability of clean environment', 'availability of qualified teachers' and 'availability of playground/play accessories' in relation to Twenty four percent, 17% and 16%. However, only 2%, 3%, and 7% of program teachers were respectively aware of *'availability of First AID Kit', 'availability of ventilation' and 'availability of running water'*.

Table 6: Proportion of teachers by their level of knowledge on specific environment condition for children healthy learning.

	Proportion of teachers by their level of knowledge in Percent (%)		
Required knowledge	**Without knowledge**	**Poor knowledge**	**Good knowledge**
Teacher's/ caretaker's education capacity	10	72	18
Ratio of child/ teacher in class routine	4	80	16
Maintaining child records	8	69	23
Punctuality/ attendance	1	57	42
Engage to child activities	0	61	39
Professional support/ supervision to a child	22	33	46
Children enrolment as referring to required children/ teacher or caregivers ratio	0	17	83
Regular child monitoring in regard to defined ill health	5	49	46
Mutual respect (teacher/child, child-/teacher)	10	21	69
Application of participatory learning strategy	22	18	60
Number of teacher per each class as according to age category of children	0	27	71
Teachers attendance to trainings and refresher courses	49	17	34

Table 6 shows proportion of teachers by their level of knowledge on specific environment condition for children healthy learning. Eighty three percent, 71%: 69% and 60% of ECCE program teachers respectively score good in relation to '*children enrolment as referring to required children/ teacher ratio', 'number of teacher per each class as according to age category of children', 'mutual respect (teacher/child, child-/teacher)',* and *'application of participatory learning strategy'.* However 49%: 22%: and 10% of studied teachers respectively scored poorly as regards to '*teachers attendance to trainings and refresher courses', 'professional support/ supervision to a child', 'application of participatory learning strategy',* and *'teacher's education qualification capacity'.*

Table 7: Availability of Screening service and Screening Strategies

Availability status	**Responses**	
Screening status	**Numbers (N=152)**	**Percent (%)**
Available	139	91
Not available	13	9
Screening strategy	**Numbers of Available strategies (N=139)**	**Percent (%)**
Medical forms/ reports/ checklists	65	47
Asking parents	53	38
Registration/filling form	21	15

Table 7. show that, out of 152 interviewed teachers 139 (91.4%) were aware of existence of screening and strategies used to identify enrolled children health. Out of three defined screening strategies 47% and 38% of studied ECCE Program teachers respectively scored higher in relation to *'medical forms/ reports/ checklists'* and *'asking parents'.* However, only 15% of studied ECCE program teachers scored least in relation to *'registration/filling forms'.*

5. CHAPTER FIVE

5.0. DISCUSSION

5.1. Situation of Early Childhood Care and Education (ECCE) Environmental conditions for children healthy learning in Kinondoni Municipality.

The study on Environmental conditions that is affecting the health of children in Early Childhood Care and Education (ECCE) programs inKinondoni Municipality, Dar es Salaam has highlighted implementation of environmental condition standards of ECCE programs and potential effects to the health of a child enrolled to these programs.

The study reveals that, 84% of program teachers in ECCE programs within the Municipality were female with the age that range 25 to 34 years. This fact indicated that most of ECCE programs provide alternative environment to the home care for children since most of the home care takers are female. The findings from this study relate to some extent with the study conducted in six Kenyan Provinces; Gaborone, Botswana; Malaysia and Ireland; that showed that Age category of ECCE program teachers is ranging between 18 to 60 years old in all five countries, and were mostly women

One fifth (21%) of the teachers had not attended any certificate or diploma courses on ECCE programming hence the potentials for inadequate capacity for training in ECCE programs. The competence of ECCE program teacher supervising child activities in ECCE programs in all defined countries, require to have competent educational background and skills from a registered recognised institution that offer ECCE educational qualification, starting at a diploma level (Lyambene M. Mutahabwa et al 2009). Finding in Kenya show that, the knowledge competence of most of ECCE teachers was poor (less than 50%): only 44% of program teachers possess a certificate award in ECCE programming (Abagi, 2008). This situation is very different if compared to Botswana: whereby 95% of ECCE program teachers in Gaborone are qualified, among which 37% are the degree holders. In this case 84% of teachers in studied programs within Kinondoni Municipality had less than a diploma course level in ECCE where only 16% had diploma or higher education

awards; this shows majority of studied teachers lack higher education proficiency for ECCE implementations. There is an obvious need to make sure all teachers are well trained and the need for refresher courses for those who were trained longer than five years is necessary.

This study has also indicated that, although high proportion of ECCE program teachers were aware of national environmental standard for child learning, still most teachers' were not aware of the specific *national standards for environmental healthy learning for enrolled children in ECCE programs.* This indicates a need to invest on more activities geared towards awareness creation of the national standards as well as knowledge on proper implementation of the same.

The fact that very few teachers were aware of the health related standards like the importanceof availability of *'First AID Kit', 'ventilation' and 'running water' in* ECCE programs indicate that health issues are not given weight during training of these ECCE teachers, therefore purposeful efforts need to be taken to raise awareness on health issues among ECCE staff for the health development of the enrolled children.

Physical infrastructure is the commonest indicator that is used to accredit and licence most institution to enable them to operate legally. Observation on physical environment of the studied Programs in the Municipality has shown to be not good enough for health development of enrolled children in respect to required national standards. The fact that only 50% were located in safer locations *(away from main roads, public services and* 69% of the programs had poor status of the *'available toilets'* while only29% of all programs have *'clean and safe toilets in use by children call for corrective actions to be taken in that side'* and, 37% of programs had poor *'size and safe playground for children'* while majority (more than 50%) had no '*playground'* at all, support this conclusion.

The defined environmental situation is very different if compared to ECCE programs in Botswana whereby 75% of studied programs are located in safe location well-structured with all required physical structures for child learning (Kabita Bose,

2008).

The findings that more than half of the ECCE program in this study had fallen short of the required national standards but still they were operational provoke question on the capacity of the regulatory bodies that deals with ECCE program in Tanzania to implement their roles. The physical quality of ECCE programs in Kenya relate to a very greater extent with that of Tanzania. More than 80% of studied programs in Kenya have no fence, poorly located, and squeezed with dust and poor ventilation. 99% of toilets in use for children are sharing toilets with adults: 90% of playground for enrolled children is not safe, with sharp object and poor physical structures (50%) O. Abagi (2008).

On the other hand, ECCE programmatic overview of the observed programs in the Municipality showed good progressin proportion that met the standard in relation to '*children enrolment as referring to required children/ teacher ratio (83%)', 'number of teacher per each class as according to age category of children (71%)', 'mutual respect (teacher/child, child-/teacher)(69%)',* and *'application of participatory learning strategy' (60%).* Also in terms of implementations of integrated activities, out of 152 interviewed teachers 139 (91.4%) were aware of existing screening and strategies used to identify enrolled children medical/ health history during time of enrolment to the programs. The main health risk screening strategy in use were, *'medical forms/ reports/ checklists' (47%):'asking parents'(38%)* and *'registration/filling forms' (15%).* However, the applied screening strategies have limitations in capturing the general medical diagnosis of a child health history in a more scientific manner.

On the other studies, ratio in terms of toilet in use for children in ECCE programs is very different when compared to developed countries (Ireland) and the three African countries. In Ireland the ratio for toilets in use by children is 11 children/ 1 toilet: Malaysia, 10 children/ 1 toilet: while in Tanzania and Kenya 20 and above children/ 1 toilet O. Abagi (2008). With programmatic overview, Tanzania child teacher ratio is almost similar to three cited countries except Kenya. In Malaysia, the child / teacher (minder) ratio is 5 children /1 minder (for children below 3 years of age): and

10 children 1 minder (for children above 3 years old).
In Botswana, the ratio is 8 children/ 1 teacher (for children below 3 years old): and 10 and above children/ 1 teacher (for children above 3 years old.).

The integrated health and nutrition support in Kenya is very similar to that of Tanzania. The nutrition support for enrolled children in studied program in Kenya is very poor (95%), moreover except from Nairobi and Coastal Provinces, there rest of ECCE in four remain provinces lack both First AID services and Fire fight programs. The situation is very different when compare to Botswana whereby 80% of the programs in Gaborone provide nutrition support to the enrolled children in the programs, moreover about 25 of the studied programs are HIV/AIDS OVC based programs O. Abagi (2008).

6. CHAPTER SIX

6.0. CONCLUSION AND RECOMMENDATION

6.1. CONCLUSION

i. The study has shown that, environmental conditions affecting the health of children to the ECCE programs are not to the satisfactory level according to national standards.

ii. Physical environment of the studied Programs' in the Municipality is not good enough for health development of enrolled children in respect to required national standards.

iii. An educational qualification of program teachers is poor where (84%) do not meet the required standard to implement child development activities in studied program.

iv. Teachers' awareness to specific national standards for environmental healthy learning for enrolled children in ECCE programs is also very low.

6.2. RECOMMENDATION

i. In insuring the healthy learning environment of ECCE programs in the Municipality, the implementers and owners of ECCE programs need not to focus on educational components only, a need for integrating health required components/ standards for health is highly needed to insure comprehensive safe-guide of the under-five health challenges in Tanzania.

ii. The government through ECD/ ECCE programs committee and sub-committee must introduce purposeful efforts such as campaigns to the owners and implementers of ECCE programs in order to mitigate significant implications in the health development of the enrolled children.

iii. A need for introducing personnel with competence to health care knowledge to programs should be considered.

iv. There is a need to make sure all teachers are well trained and refresher courses for those who were trained longer than five years is necessary.

v. Reports on assessed ECCE programs need to be available to all stakeholders of ECD programs in order to implement the recommended actions.

REFERENCES

1. Colin, K (2011). Evaluation of UNICEF's Early Childhood Development Programme with Focus on Government of Netherlands. Tanzania Country Case Study Report.
2. Lyambene, M.M (2009). Early Child Development and Care in Tanzania. Vol. 179 No. 1, January 2009, 55-67.
3. National child Development Policy, 2006.
4. Bertha H.M (1999). Activities for Early Childhood Care and Education in Tanzania mainland. A draft report for UNESCO-Tanzania Institute of Education.
5. Kweka, A.N. and E. Binagi (1998). The situation of Early Childhood Education in Tanzania: the case of Temeke District.
6. Leach, V. (1995): Towards Improved Child Care and Development in Tanzania. A Report Prepared for UNICEF, Dar es Salaam.
7. Nicholas Burnett, (2010), Moscow framework for action and cooperation, Harnessing the Wealth of Nations, Moscow, Russian Federation.
8. Inter-Agency Commission (1990): World Declaration of Education for All Jomtien: World Conference on Education for All.
9. Omari, C.K. (1989). Child Care Arrangements in the Urban Poor – The Case of Dar es Salaam - Research Report for UNICEF. Dar es Salaam: UNICEF Office.
10. www.childinfo.orgEarly Childhood Development and Early Childhood Care and Education Programming.
11. Organisation for Economic Cooperation and Development, *Starting Strong II, Early Childhood Education and Car* (OECD) Paris, 2006, pp. 35-36.
12. W. Steven Barnett (2005). Long-Term Effects of Early Childhood Programs on Cognitive and School Outcomes.
13. O. Abagi (2008). Situation analysis of implementation of strategy for ECD policy framework and ECD service standard guidelines in Kenya
14. Kipkorir, L.I. &Njenga, A.W. (1993). A Case Study of early Childhood Care and Education in Kenya.
15. Kabita Bose (2008). Gaps and remedies of Early Childhood

Care and Education (ECCE) programs of Botswana.

16. Republic of Botswana (2001). Early Childhood Care and Education Policy - 2001. Botswana: Government Printers, Gaborone.
17. Saluja, G. Early, D.M. Clifford, R. M. (2002) Early Childhood Research and Practice: Demographic characteristics of Early Childhood teachers and structural element of Early Care in the United States. 4(1).
18. M. Akinware. (2004). Zambia ECD country report.
19. www.unicef-irc.org Situation of Early Childhood Care and Education Programs in Sub Saharan Region.
20. Mahery P, Jamieson L & Scott K (2011) *Children's Act Guide for Child and Youth Care Workers*. Edition 1. Cape-Town: Children's Institute, University of Cape Town & National Association of Child and Youth Care Workers.
21. Patel, F. & Crouch. L (2006). Investment Choices in Education: the South African Experience.
22. Moloi, M. & Strauss, J. (2005). The SACMEQ II Project in South Africa: A Study of Schooling and the Quality of Education. SACMEQ. 26 October 2005. Harare.
23. http://www.sacmeq.org/links.htm
24. iqp@uvic.ca – Situation of Early Childhood Care and Education Programs in Africa.
25. World Conference on Early Childhood Care and Education by City of Moscow and UNESCO (2010), Moscow Canadian Delegation Report

ANNEXURES

ANNEXURE No. I.

DATA ANALYSIS/ MANAGEMENT

❖ **Categorisation and definition of the terms**

The measuring in excellence of defined environmental condition depended on the level of performance categorized as number 1 to 5 where by each number depicted its own value.

The following Key helps in defining the value of each defined variable of following result table 2 to 6.

Key	**Non**	**Very Poor**	**Poor**	**Moderate**	**Very Good**	**Excellent**
Value in Number	0	1	2	3	4	5
Value in % as according to set ECCE standards	0	20	40	60	80	100

In summarizing the results, data on category of very poor and poor were merged to fall under a single category of poor: while the moderate, very good and excellent data categories were also merged to another single category of good.

Clarification of some result component appeared on the moderate category will be made in order to avoid the misinterpretation of observed findings of this research.

- **Indicator scale that shows the observed status levels in the program that corresponds to score 0, 1-5: in Table 2 to 6. (with reference from the Key above)**

A. Physical environment condition of studied 52 ECCE Programs.

- **Availability of clean water**

Analyzed level of implementation	**Scale used to Analyze**	**Definition of the scale used.**
Not available	0	Absence of system for running/tap water

Very poor	1	System for running/tap water in place but with no assurance of water availability.
Poor	2	Running/tap water systems is availability, but without an assurance of specified days for water availability.
Moderate	3	Running/tap water systems is availability, with assurance of 2days water availability per week.
Very good	4	Running/tap water systems is availability, with assurance of 2 to 4 days water availability per week.
Excellent	5	Running/tap water systems is availability throughout the week.

- **Safeness of play ground**

Not available	0	Absence of playground for children
Very poor	1	Playground for children is available not fenced, not used for public sports activities, and with observed sharp objects.
Poor	2	Playground for children is available, not fenced, used for public sports activities, with observed sharp objects.
Moderate	3	Playground for children is available, fenced, neat with less sharp objects, also used for public sports activities.
Very good	4	Playground for children is available, fenced, without sharp objects and arrangement of age category playing routine.
Excellent	5	Playground for children is available, fenced without sharp objects and clear arrangement of age category playing routine, supervised by class teachers.

- **Size of play ground**

Not available	0	Absence of playground for children
Very poor	1	Playground for children is available at a very small size in a neighborhood and not proportional to the number of enrolled children.
Poor	2	Playground for children is available at a small size, in a neighborhood- used for public sports activities: and limited with playing facilities being not proportional to number of enrolled children.
Moderate	3	Playground for children is available at a moderate size in a neighborhood- used for public sports activities: with moderate type of playing facilities not very much proportional to number of enrolled children.
Very good	4	Playground for children is available, spacious and faced with different varieties of playing facilities for children proportional to the number of enrolled children at the school/center: but without clear arrangement of age category playing routine.
Excellent	5	Playground for children is available, faced with all varieties of playing facilities for children proportional to the number of enrolled children at the school/center: and a clear arrangement of age category playing routine.

- **School/ centre environmental cleanliness**

Not available	0	A class hosted in individual residence without extra specified area for children activities.
Very poor	1	The location of the school is at a public service area; including bar and market place where its environment cannot be controlled by the school itself.

Poor	2	The school is in wet area with high flow of mud and sewage systems. Its location is along the road which results into frequent dusty of the centeras due to vehicle movements.
Moderate	3	The school is fenced, located in a dry area but along the road which results into frequent dusty to the center as due to vehicle movements.
Very good	4	The school is fenced, located in a dry and quit area, not along the road thus limits frequent flow of dusty to the center due to vehicle movements.
Excellent	5	The school is fenced, surrounded by well planted garden in a quit area, not along the road thus limits flow of dusty to the center due to vehicle movements.

- **Cleanliness and safeness of toilet used by children**

Not available	0	Absence of toilet specific for children.
Very poor	1	Public toilet at a nearby bar and market place is in use for both children and the whole community around.
Poor	2	A nearby residential toilet is in use.
Moderate	3	A school/ center has its own toilet used by both teachers and children.
Very good	4	A school/ center have its own toilets. The teachers have their own toilet separate to that of children.
Excellent	5	A school/ center have its own toilets basing on gender differences. The teachers have their own toilets separate to that of children.

- **Size of windows proportion to required size for ventilation**

Not available	0	Absence of windows in a class.
Very poor	1	1 to 2 windows with less than 4 ft size each.
Poor	2	1 to 2 windows with 4 ft size each.

Moderate	3	2 to 4 windows with 4 ft size each.
Very good	4	2 to 4 windows with 4 to 6 ft size each.
Excellent	5	2 to 4 windows with 6 and more ft size each.

- **Safeness of learning materials**

Not available	0	Absence of learning materials for children.
Very poor	1	Very little material, made by steel with sharp finishing edges. Lack of specified storage facility for materials.
Poor	2	Very little material, made by wooden materials with sharp finishing edges. Absence of specified storage facility for materials.
Moderate	3	Materials are not proportion to number of children, made by wooden and plastic materials and a smooth finishing without sharp edges. Absence of specified storage facility for materials.
Very good	4	Materials are proportion to number of children, made by wooden and plastic materials and a smooth finishing without sharp edges. A specified storage facility for materials is also in place.
Excellent	5	Materials are characterized by age group categories proportion to number of children: made by wooden and plastic materials, with smooth finishing edges. A specified storage facility for materials is also in place.

- **Number of children not to exceed 25 per class**

Not available	0	Absence of defined limit on required number of children enrollment per class.
Very poor	1	60 and above children per class.
Poor	2	40 to 60 children per class.
Moderate	3	30 to 40 children per class.

Very good	4	10 to 30 children per class. Basing on age group category of the children.
Excellent	5	5 to 25 children per class. Basing on age group categoryof the children.

- **Number of toilet in use for children**

Not available	0	Absence of toilet specific for children.
Very poor	1	1 public toilet at a nearby bar and market place.
Poor	2	1 toilet at a nearby residential.
Moderate	3	1 toilet used by both teachers and children at a school/ center.
Very good	4	1 toilet specific for children at a school/ center but not basing on gender difference.
Excellent	5	More than 1toiletfor children basing on gender differences.

B. Additional observed physical environment condition of ECCE Programs

As additional information on physical environmental condition: Table 2 above has already assisted in showing scales that led a researcher to arrive to shown percentage in table 3. (Specifically in environmental sanitation: mixed toilets: location of the centre/school: and absence of teaching AID/ learning materials. In addition, the defined key in Page number 29 also clarifies the shown percentage basing on set scale of ECCE implementation.

Moreover the table was specifically focusing to physical ECCE structures that supporting health of the enrolled children. With that fact therefore, the results were targeting more information on the environmental sanitation: mixed toilets: and location of the centre/school.

C. Number of teachers aware to national environmental learning-condition standards important for health of children in ECCE programs

The data responding to table 4.was derived from question 10 on page 44 of the designed questionnaire used at a time of data collection process.

D. Knowledge and Competence of a personnel (teacher) coordinating child health care activities.

▪ **Teacher's education capacity**		
Analyzed level of knowledge	**Scale used to Analyze**	**Definition of the scale used.**
Not available	0	Non
Very poor	1	Primary education
Poor	2	Secondary education and learnt through practice
Moderate	3	ECCE short courses certificate level
Very good	4	ECCE Diploma level
Excellent	5	ECCE University Degree

The above table shows major indicator scale that helped in defining the knowledge status level of teachers coordinating child health care activities in the studied ECCE programs. The District Social Welfare Officer, delegated officers in supervising ECCE programs uses **level of education of ECCE programs' implementers** as a main indicator scale in defining the general knowledge and competence level of personnel to the programs. This is due to the fact that, basing on conducted surveys in few studied programs at the District level, results has shown that ECCE programs implementers who attained training on ECCE programing, have general skills and competence on child health care activities to the programs.

With that fact therefore, and with defined key in page 29, results on teacher's education capacity (as shown in table 6.) determined observed competence of interviewed teachers in the studied ECCE programs.

▪ **Ratio of child/ teacher in class routine**		
Analyzed level of knowledge	**Scale used to Analyze**	**Definition of the scale used.**
Not available	0	Non
Very poor	1	1 teacher/20-25 one to three year old child: and 1 teacher/40-60 four to five year old children.

Poor	2	1 teacher/10-15 one to three year old child: and 1 teacher/30-40 four to five year old children.
Moderate	3	1 teacher/10-15 one to three year old child: and 1 teacher/20-25 four to five year old children.
Very good	4	1 teacher/4-5 one to three year old child: and 1 teacher/30-40 four to five year old children.
Excellent	5	1 teacher/4-5 one to three year old child: and 1 teacher/20-25 four to five year old children.
▪ **Maintaining child records**		
Not available	0	Non
Very poor	1	Special area for child records without records in it
Poor	2	Special area for child records with unorganized records in it
Moderate	3	Special area for child records and assigned teacher for record keeping with unorganized records.
Very good	4	Special area for child records and assigned teacher for record keeping with organized records not in categorical form.
Excellent	5	Special area for child records and assigned teacher for record keeping with organized records in categorical form (indoor records, outdoor records, children reports).
▪ **Punctuality/ attendance**		
Not available	0	Non
Very poor	1	Only one teacher available at a center for less than four hour on a shift bases
Poor	2	Only one teacher available at a center daily on a shift bases
Moderate	3	Two teachers available at a center daily on a shift bases
Very good	4	Two teachers available at a center full time daily.

Excellent	5	Three and more teachers available at a center full time daily.
▪ **Engage to child activities**		
Not available	0	Non
Very poor	1	Only one teacher to assist indoor and outdoor children
Poor	2	Two teachers to assist indoor and outdoor children
Moderate	3	Three teachers to assist indoor and outdoor children activities
Very good	4	One principle and two assistant teachers to routinely assist indoor and outdoor children activities
Excellent	5	One principle and three to five assistant teachers to routinely assist indoor and outdoor children activities
▪ **Professional support/ supervision to a child**		
Not available	0	Non
Very poor	1	Lack of teacher engagement to children activities.
Poor	2	Very little time of teacher engagement to children activities.
Moderate	3	Teacher's engagement to children activities less than three hours during indoor activities.
Very good	4	Teacher's engagement to children activities for three to four hours during indoor activities.
Excellent	5	Teacher's engagement to children activities for more than four hours during indoor and outdoor activities.
▪ **Children enrolment as referring to required children/ teacher or caregivers ratio**		
Not available	0	Non

Very poor	1	1 teacher/20-25 one to three year old child: and 1 teacher/40-60 four to five year old children.
Poor	2	1 teacher/10-15 one to three year old child: and 1 teacher/30-40 four to five year old children.
Moderate	3	1 teacher/10-15 one to three year old child: and 1 teacher/20-25 four to five year old children.
Very good	4	1 teacher/4-5 one to three year old child: and 1 teacher/30-40 four to five year old children.
Excellent	5	1 teacher/4-5 one to three year old child: and 1 teacher/20-25 four to five year old children.
▪ **Regular child monitoring in regard to defined ill health**		
Not available	0	Non
Very poor	1	Absence of personnel for regular child health monitoring.
Poor	2	Absence of personnel for regular child health monitoring with informal registry for registering child health history.
Moderate	3	Availability of teacher for regular child health monitoring.
Very good	4	Availability of teacher for regular child health monitoring with informal registry for registering child health history.
Excellent	5	Availability of teacher for regular child health monitoring with formal registry for registering child health history.
▪ **Mutual respect (teacher/child, child-/teacher)**		
Not available	0	Non
Very poor	1	Lack of teacher's engagement to children activities with frequent report of child bully cases and teachers harassment behaviors to children.

Poor	2	Little teacher's engagement to children activities with frequent report of child bully cases and teachers harassment behaviors to children.
Moderate	3	Full time teacher's engagement to children activities with frequent report of child bully cases and teachers harassment behaviors to children.
Very good	4	Full time teacher's engagement to children activities with little report of child bully cases and teachers harassment behaviors to children.
Excellent	5	Full time teacher's engagement to children activities with Little report of child bully cases and absence of teachers' harassment behaviors to children.
▪ **Application of participatory learning strategy**		
Not available	0	Non
Very poor	1	Limited space, materials and teachers to facilitate engagement of both children and teachers.
Poor	2	Availability of teachers but limited space and materials to facilitate engagement of both children and teachers.
Moderate	3	Availability of teachers and space but limited materials to facilitate engagement of both children and teachers.
Very good	4	Availability of space, materials and teachers but not proportional to facilitate engagement of both children and teachers.
Excellent	5	Space, materials and teachers are available proportional to facilitate engagement of both children and teachers.

▪ **Number of teacher per each class as according to age category of children**		
Not available	0	Non
Very poor	1	One teacher to all enrolled children age categories
Poor	2	One teacher to 1 to 3 years age category of children and two teacher to 4 to 5 years age category of children
Moderate	3	Two teacher to 1 to 3 years age category of children and one teacher to 4 to 5 years age category of children
Very good	4	Three teachers to 1 to 3 years age category of children and two teachers to 4 to 5 years age category of children
Excellent	5	Four teachers to 1 to 3 years age category of children and three teachers to 4 to 5 years age category of children
▪ **Teachers attendance to trainings and refresher courses**		
Analyzed level of knowledge	Scale used to Analyze	Definition of the scale used.
Not available	0	Non
Very poor	1	Once between six to ten years
Poor	2	Once in five years' time
Moderate	3	Once in three to four years' time
Very good	4	Once in two years' time
Excellent	5	Every year

ANNEXURE No.II.

Research Tool Number 1.

A DESIGNED QUESTIONNAIRE FOR ASSESSING THE ENVIRONMENTAL CONDITIONS AFFECTING CHILD'S HEALTH CARE IN EARLY CHILDHOOD CARE AND EDUCATION (ECE) PROGRAMS IN DAR ES SALAAM.

This questionnaire is designed in order to facilitate in describing the implementation of Early Childhood Care and Education Standards affecting health of the enrolled early age children in Kinondoni, District-Dar es Salaam.

The contents within are divided into 5 main parts where by:

- Part A aim at gathering the general information about the Program
- Part B gathers the general awareness information on existing ECD Standards
- Part C gathers information for **specific objective number two** (Knowledge competence of health care personnel-**at the institutional level**)
- Part D gather information on **specific objective number three** (Screening program and First Aid services prevail in the main program)
- Part E aim at collecting the general information on child health issues not included in the mentioned parts

NOTE:

The tool is intended to gather information from **school care takers** to be selected in a random form during the time of interview with either of Day Care, Nursery and Kindergarten schools to be studied.

Questionnaire No._____

A. General information about the Program (Fill the required information in space provided)

1. Name of the Day Care/Nursery/ Kindergarten …..
2. School/centre Location-Ward ……..... Street.....
3. Tel.....E-mail.....
4. Postal Address……..
5. Year registered.....
6. Age of the interviewee (approximately)…….
7. Sex of the interviewee……
8. Position to the program.....

B. General awareness on existing ECD Standards

(Select collect answer and also fill the required information in the following questions)

- Refer to the **main research objective** (To describe the implementation of Early Childhood Care and Education standards affecting health of the enrolled early age children: Dar es Salaam region)

9. Type of intervention implemented in your programs
    a. Nursery school Program
    b. Day Care Program
10. Is the managerial aware to existing standards relevant to the implementation of the program
    a. Yes
    b. No
11. If the answer in question number eleven is yes, then mention at least three known ECCE standards
    a. .....
    b. .....

c. .....

General information to part C, D and E

Please make a cycle or tick mark to a correct answer to each question bellow. There will also be few questions that will require some information in filling given blank spaces: for instance questions number 12, 22, 25 and 26.

C. **Questions for specific objective number two:**

- **The following questions will guide researchers towards understanding Knowledge competence of personnel coordinating health care activities in the school/ institution**

12. No of personal coordinating health care activities to the program.....
13. If the answer to question number 12 is (0), who is a personnel responsible to integrated health program to children in the institution
    a. All staff
    b. Specific health personnel
    c. A consultant/company
    d. Specific health insurance
14. Level of education of the defined qualified health program staff
    a. Certificate level
    b. Diploma certificate
    c. Higher University Degree
    d. Non
15. Ratio of Children/teacher or care taker as according to age category of a child
    a. 1 teacher or caretaker/4- 5 one to three year old children
    b. 1 teacher or caretaker/10-15 one to three year old children
    c. 1 teacher or caretaker/ 20-25 four to five year old children
    d. 1 teacher or caretaker/30-40 four to five year old children
16. Number of children enrolled in one classroom
    a. 5 to 10
    b. 11 to 20

c. 20 t0 30
d. 30 and above

17. Number of classes in the school/ institution as in relation to the number of enrolled children
    a. Number of classes is small compare to the number of enrolled children
    b. Number of classes is moderate as compare to the number of the enrolled children
    c. Number of classes is equivalent to the enrolled children
18. How can you define ventilation status of the existing class rooms as regarding to the ECE required size (6x6 Ft.)
    a. The size of the windows are of the same required ECCE standard
    b. The size of the windows are moderate as compare to the required ECE standard
    c. The size of the windows are smaller as compare to the required ECE standard
19. The following table tries to understand the level of knowledge of the personnel in charge to child health activities in the program. Please mark with a tick to the correct number against the intended question:

    The meaning depicted by each number is as follows:

    Number 0 = Non: Number 1= Very Poor: Number 2 = Poor: Number 3= Moderate: Number 4=Very good: Number 5= Excellent

S/n	**Indicator measuring Personnel in charge knowledge Standard**	**Level of implementation at the program level**					
		0	**1**	**2**	**3**	**4**	**5**
i.	Level of trained education capacity of a qualified personnel to implement chid developmental activities						
ii.	Ratio of child/ teacher in class routine						
iii.	Level of teachers in maintaining child records						
iv.	Rate of punctual teacher attendance						
v.	Rate of teacher's time spent engaging to child						

	activities						
vi.	Percentage of professional support/ supervision to a child						
vii.	Percentage of the enrolled children as referring to the required children/ teacher or care givers ratio						
viii.	Rate of regular child monitoring as regarding to defined ill health						
ix.	Proportion of mutual respect (teacher/child, child-/teacher)						
x.	Rate of teacher's application of participatory learning strategy						
xi.	Total number of teacher per each class as according to the age category of the children						
xii.	Rate of teachers attendance to trainings and refresher courses						

D. Questions for specific objective number three

- **Screening program and First Aid services prevail in the main program**

20. Is there any existing screening program that assists in knowing child's health history before enrolled to the program?
    a. Yes
    b. No
21. If the answer is yes, mention it/them
    i. .....
    ii. .....
    iii. .....
22. Mention the **number** of enrolled children to your program with medical history,
    a. Obesity.....
    b. Asthma.....

c. Sickle cell.....
d. Allergies.....
e. Epilepsy.....
f. Disability.....
g. HIV/AIDS……

23. How do the program/ institution handles the above mentioned cases in question No. 22?
    a. Network with heath facilities
    b. Use an employed qualified medical personnel
    c. Use of available first aid and referral system
24. As referring to the screening service and defined number of children with health problems in your program, is there any form of first aid services in your program
    a. Yes
    b. No
25. If the answer in the question number 24 is yes, mention them
    i. .....
    ii. .....
    iii. .....

E. Factors associated with the health care services in the programs

26. Mention any health care challenges experience by children in your program

……

Annexure No.III.

Research Tool Number 2.

A DESIGNED RESEARCH TOOL FOR ASSESSING THE ENVIRONMENTAL CONDITIONS AFFECTING CHILD'S HEALTH CARE IN EARLY CHILDHOOD CARE AND EDUCATION (ECE) PROGRAMS IN DAR ES SALAAM

GUIDING QUESTIONS FOR CONDUCTING IN-DEPTH INTERVIEWS WITH ADMINISTRATORS ADMINISTERING EARLY CHILDHOOD CARE AND EDUCATION PROGRAMS AT BOTH NATIONAL AND DISTRICT LEVELS

Note:

This tool will assist in determining the competence of personnel coordinating health care activities in ECE Programs: **a specific objective number II of this research.**

The tool will only be administered to **Administrators** of ECCE Programs: and it is therefore divided into four main categories. Both of which focus to these personnel administering ECCE programs at both the National and District levels, including:

A. At the Ministerial Level

B.At the District level (with Public Authority)

QUESTIONS:

A. At the Ministerial Level

1. Which specific department(s) at the Ministry coordinates the ECCE Programs in the country?
2. How the Ministry oversee the acquisition of legal registration of ECCE program in the country?
3. How the Ministry insure quality assurance of registered ECCE programs?
4. How does the Ministry participate in international or global forums on ECCE?
5. How the Ministry enforces ECCE Programs in the country to adherence with the United Nation-UNESCO- set ECCE standards? (with accordance to local/national setting)
6. How the Ministry monitors and evaluates implementation of ECCE Programs in the country if adhere to set healthy environmental learning standards of enrolled children?
7. Which specific measures does the ministry undertake to ECCE Programs that fail to adhere with set ECCE standards?

B. At the District level (with Public Authority)

1. How the LGA through its department monitors and evaluates implementation of ECCE Programs at the district level?
2. How does the LGA collaborate with the Ministry in monitoring and evaluating the implementation of ECCE Programs at the District level if adhere to set global healthy learning standards?
3. How does the LGA collaborate with the ECD Programs in empowering implementers of ECCE programs with on-going National strategies and policies for healthy environmental learning of enrolled children to ECCE programs in Kinondoni Districts?

ANNEXURE No.IV.

Research Tool Number 3.

A DESIGNED CHECKLIST FOR ASSESSING THE ENVIRONMENTAL CONDITIONS AFFECTING CHILD'S HEALTH CARE IN EARLY CHILDHOOD CARE AND EDUCATION (ECE) PROGRAMS IN DAR ES SALAAM

This checklist is designed in order to facilitate the assessment process of Health Care Services status existing in selected ECE Programs found in Kinondoni District-Dar es Salaam.

- The checklist will assist the researcher to study specifically research **objective number one**, which aiming at: **describing the physical environment of the ECE Programs in respect to required standards suitable for child healthy learning environment**
- This is to say, the list of issues listed in this document then will be guiding the researchers in observing the environmental conditions of ECE programs in the defined locality; including Day Care, Nursery and Kindergarten schools.

Note:

Only researchers will be entitled to use this designed tool.

Checklist No._____

A. General information about the Program

- Please fill all required information in each space provided below.

1. Name of the Day Care/Nursery/Kindergarten …….....
2. School/centre Location.....
3. Tel.....
4. E-mail.....
5. Approximate number of enrolled children available to the institution ……

B. The description of physical environment of the ECE Programs in respect to required standards suitable for child healthy learning environment

6. General comment to the observed sanitation and cleanliness situation of the institution (specify on the observed status of each category below by ranking with numbers 1 to 5)

   The meaning depicted by each number is as follows: Number 0 = Non: Number 1= Very Poor: Number 2 = Poor: Number 3= Moderate: Number 4=Very good: Number 5= Excellent

S/n	**Areas to be observed in-terms of sanitation and cleanliness in the Program**	**Observed sanitation status**		**Observed Status Level in the program**					
		+ve	**-ve**	**0**	**1**	**2**	**3**	**4**	**5**
i.	Classroom								
ii.	Cafeteria/ dining room								
iii.	Playground								
iv.	Toilets								
v.	Kitchen								
vi.	Store room for kitchen								

	accessories								
vii.	Children rest room								
viii.	Availability of cleanliness accessories								
ix.	Availability of special personnel as cleaner for the institution								
x.	Safenessof existing screening instruments for child's health								
xi.	Security of existing screening instruments for child's health								

7. As referring to UNESCO global indicators in measuring the standards for ECCE Program to each member state, please select and mark by ticking the **status** of mentioned standards as in relation to **defined level of implementation** on the following required global standard to ECCE Programs.

   The meaning depicted by each number is as follows: Number 0 = Non: Number 1= Very Poor: Number 2 = Poor: Number 3= Moderate: Number 4=Very good: Number 5= Excellent

S/n	**Indicator measuring the ECCE Environmental Standard**	**Indicator status**		**Status/ implementation Level in the program**					
		+ve	**-ve**	**0**	**1**	**2**	**3**	**4**	**5**
i.	Range of the availability of clean water (running water)								
ii.	Level of safeness of the play ground								
iii.	Size of the playing ground for the enrolled children								
iv.	Level of general school/ centre								

	environment cleanliness								
v.	Level of cleanliness and safeness of toilets use by children								
vi.	Size of windows (proportion to classroom ventilation) per set standards (6x6)								
vii.	Percentage of safeness of learning materials in use by children in the class								
viii.	Number of children not to exceed 25 as per class size								
ix.	Numbers of toilets currently used by children are more than 2 and base in gender of the children (elaborate in part c)								

C. Other observed environmental conditions

i. .....

ii. .....

iii. .....

iv. .....

v. ……

ANNEXURE No. V. **SUPPORTING PICTURES**

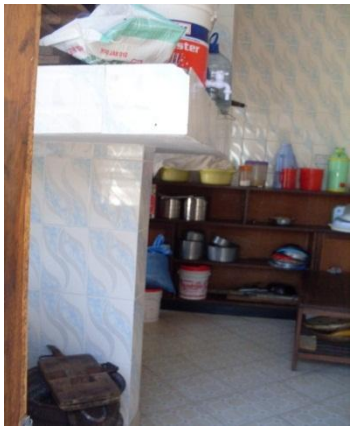
Safeness and sanitation







Nutrition support







Playing facilities







Learning materials and teaching Aid





