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Evaluation of Quality Assurance of School Health Services at Primary Health Care Centers in Al-Numaniyah District

A dissertation Submitted By

Ghassan Abdul-Ameer Washi

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Supervised By

Prof. Dr. Naji Yasser Saadoon, PhD

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بسمِ اللهِ الرحمنِ الرحيمِ

مَنْ عَمِلَ صالِحاً مِنْ ذَكَرٍ أَوْ أُنْثى وَ هُوَ مُؤْمِنٌ فَلَنُحْيِيَنَّهُ حَياةً طَيِّبَةً وَ لَنَجْزِيَنَّهُمْ أَجْرَهُمْ بِأَحْسَنِ ما كانُوا يَعْمَلُونَ

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I certify that this dissertation entitled " ***Evaluation of Quality Assurance of School Health Services at Primary Health Care Centers in Al-Numaniyah District"*** *which is submitted by* ***Ghassan Abdulameer Washi****, and prepared under my Supervision at the College of Nursing, University of Babylon in partial fulfillment of the requirements for the degree of doctorate of Philosophy in nursing.*

Signature

Professor Dr. ***Naji Yasser Saadoon***

Academic Supervisor

College of Nursing

University of Babylon

Date: / /2023

Head of Family and Community Health Nursing Department

Prof. Dr. Amean A. Yasir

College of Nursing / University of Babylon

Date: / / 2023

Committee Certification

We, members the examining committee, certify that we have examined the dissertation, which entitled *" **Evaluation of Quality Assurance of School Health Services at Primary Health Care Centers in Al-Numaniyah District"*** Submitted by the student ***Ghassan Abdulameer Washi*** in department of Community Health Nursing and the student in its contents and what is related to it, and we decide that it is adequate for awarding the degree **of Doctorate of Philosophy in nursing / Community Health Nursing** with an estimate (

) on / / 2023.

Member
Prof. Dr. Salma Kazem Jihad
College of Nursing
University of Babylon
Date: / / 2023

Member
Prof. Dr.Wissam Jabbar Kasim
College of Nursing
University of Baghdad
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University of Babylon
Date: / / 2023

chairman
Prof. Dr. Amean A. Yasir
College of Nursing
University of Babylon
Date: / / 2023

Approved by the Council of the College of Nursing

Signature

Name: Prof. Dr. Amean A. Yasir

Dean of the College of Nursing, University of Babylon

Date: / / 2023

DEDICATION

To the source of courage and kindness my dear father

To my dear mother,

who supported me in all areas of life. I Ask Allah to keep them healthy and protect him from all evil,

To my wife, sons, and daughters,

To my brother and sisters

Especially my sister who left us in body and stayed with us in remembrance and tenderness(Wijdan)

To my friends.

With love and all respects

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ABSTRACT

School health is considered one of the important elements of primary health care because it deals with a large and important segment of society, where students constitute nearly a third of the community's population.

The study aims to evaluate the quality assurance for school health services. Also, to determine satisfaction of school principals with primary health care centers PHCCs toward school health services.

A descriptive study using evaluation approach consisting of (304) participants selected by convenient sample throughout the use of nonprobability sampling approach distributed to (6) main primary health care centers, (133) elementary schools, (32) Health care providers and (133) consumers as school principals at Al- Numaniya District from 5th July 2022 to 25th April 2023. The questionnaire was developed and constructed after a rigorous review of literature, it comprises four questionnaires forms, the data collection by the questionnaire and through interview technique and researcher observation. Interviews are conducted with directors of main primary health care centers, health care providers and school principals. Data were analyzed by using descriptive and inferential statistical analysis in (SPSS) ver-23.

The study shows that evaluation of the quality assurance related to structure standards of organization for each primary health care centers and elementary school (66.7%), (78.9%) respectively. Regarding process standards, it is shown (50.0 %) of the health care providers expressed a fair activity and duties, while outcome showed (64.7%) of the school principals expressed a somehow satisfaction towards elementary school health care services.

The study concludes evaluation of quality assurance related to primary health care centers & elementary school, activity and duties of health care providers and satisfaction of school principals were fair as described by

moderate average in primary health care centres regarding school health services. There was a significant positive correlation between outcome of quality assurance for school health services with regard to structure of primary health care centres.

The study recommended that periodical monitors the school environment by staff of school health unit in the primary health care centers and focuses on the following domain: insect and rodent control, clean workers, medical supplies and safety requirements and canteen. Activation of relationship between school health unit and schools' administrations to accomplish better school health services.

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LIST OF ABBREVIATION

Abbreviation	Text
AAP	American Academy of the Pediatrics
BC	Before Christ
BMI	Body Mass Index
CDC	Centers for Disease Control
$\chi 2$	Chi square
CEFP	Council of Educational Facility Planners
Df	Degree of freedom
EPA	Environment Protection Agency
FRESH	Focusing Resources on Effective School Health
FAO	Food and Agriculture Organization
f	frequencies
HIV	human immunodeficiency virus
K. S	Kolmogorov-Smirnova
M.s	Mean score
MDGs	Millennium Development Goals
MOH	Ministry of Health
NASN	National Association of School Nurses
NASBHC	National Association of School-based Health Center
NCES	National Center for Education Statistics
NGOs	Non-Governmental Organizations
NS	Non-Significant
ORS	Oral Rehydration Solution
OAE	Otoacoustic emissions
PHC	Primary Health Care
PHCCs	Primary Health Care Centers
P-value	Probability value
QA	Quality assurance
SBHCs	School based health centers
SHP	school health program
SHS	School Health Services
Sig.	Significance
S	Significant
SPSS	Statistical Package for Social Sciences

SPO	Structure, Process, and Outcomes
UN	United Nations
UNICEF	United Nations Children's Fund
UNESCO	United Nations Educational, Scientific and Cultural Organization
US	United Stated
USAID	United States Agency for International Development
USA	United States of America
WHO	World Health Organization

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Chapter One
Introduction

Chapter One

Introduction

1.1. Introduction:

School has been shown to have an influence on children's psychosocial development and mental health. It is critical to establish a healthy and supportive learning environment that is essential for a child's growth (Abd Al-Hussain& Baiee, 2017).

One of the most important aspects of every nation's overall health-care system is a school health program, often known as a SHP. Schools, together with families, are the institutions that are primarily responsible for the students' overall development, growth, and education (Ademokun *et. al*., 2014).

A school health program is an important tool in achieving excellent academic achievement for all pupils. It helps students have a greater ability to attend culturally appropriate issues and promote increased academic success, as well as increased community emphasis on pupil success and encourage a positive health behavior that will be taught in schools and become further familiar with parents, community works, and residents. As a result, schools will gain from improved parental involvement, and students will profit by making the most efficient use of the resources available in the school and the community (Manthoor, 2014).

School health services (SHS) are services that are offered by a health professional to children who are enrolled in elementary education. These services can be delivered to pupils either on the school grounds or at a health service that is located outside of the school. SHS exists in some form in almost all nations, but many of the programs designed to provide it are not founded on evidence, are not effectively executed, do not receive sufficient funding, and/or have restricted reach and scope. School-aged children (those aged 5–12 years) in

every WHO region experience a wide variety of health problems, the majority of which are preventable (Oyinlade et.al., 2014).

These health problems include unintentional injuries, interpersonal violence, sexual and reproductive health issues, communicable diseases, noncommunicable diseases, and mental health issues. In addition, children and adolescents who are of school age have good health and development requirements in the areas of sexuality, psychosocial functioning, neurocognition, and psychosocial functioning as they move from childhood to maturity. The age group from 5 to 12 years old has a significant unmet demand for high-quality healthcare; nevertheless, the quality of health services available to this demographic is inconsistent and coverage is inadequate worldwide. The implementation of efficient health services on a large scale for children presents a once-in-a-lifetime opportunity in schools (WHO, 2021).

The delivery of school health services SHS, is commonly considered to be one of the more crucial parts of the health program in schools, and they are responsible for the students' overall health. Active school health services aid in the early detection and prevention of illnesses among students. School health services are those that are worried with the health and educational attainment of students at an appropriate age by providing direct services of health care to students in coordination with the administration and staff of the school (Oyinlade et.al., 2014).

The most crucial component of a school health program is SHS, and they are offered to students by experts such as nurses, physicians, health educators, dentists, and other trained health professionals. Furthermore, the educational staff is focusing on health assessments, the maintenance and the improvement of student health as well as the health of the entire school community, as well as school health services. The health services also assist pupils in getting the most out of their school working days (Oghenewogaga and Margaret, 2014).

School student spend a significant portion of their period as a human cluster in a constrained combined setting at school. In the least escalation in the environment of school elements might have both a temporary effect with high rates of illness occurrences and a lasting good outcome. Simultaneously, it is extremely simple to keep track of all of the difficulties in that integrated environment that may have a detrimental or beneficial influence on the student's health. As a result, during the school years, it is critical to build appropriate knowledge, experience, and a favorable attitude toward school health services. As a result of these fundamental facts, the use of a number of different school health measures is one of the features that is considered to be among the most crucial components of an entire school health program (Salih and Khalifa, 2013).

Health promotion and preventative care are the focus of school health services, which are delivered to students by trained medical workers and other experts. It doesn't matter where the services are delivered; what matters is that they be delivered as part of a written agreement between the school and the organization that delivers medical care in order to evaluate, improve, and safeguard the health of each and every kid who attends the school (Baltag et al., 2015).

Internationally, school health programs have made great progress. Here in the United States of America is found the National Association of School Nurses (NASN) which established a conceptual framework in the twenty-first century that highlights school health treatments as general and stresses the pupil, family, school, and public as explicit components in the care process. A rising amount of research report on a variety of health-care treatments aimed at addressing a variety of health problems and concerns that schoolchildren face. These include, among other things, weight control methods, managing chronic diseases

including asthma and diabetes, and assessing and managing incidents of child abuse (Al-Yateem and Brenner, 2016).

School health services deal with health issues that have occurred or may occur. School health services offer first aid and emergency treatment, as well as diagnosing, planning, and implementing chronic condition management, such as diabetes. Education plays a supporting and coordinating function in the delivery of services. The school health services provide students with access to other health care experts as well as recommendations to other professionals. School health services are critical in linking school employees, parents, and the community with health professionals in order to enhance student health and deliver a healthy school environment. School health services (SHS) collaborate vigorously with family and school community to improve students' and parents' capacity to adjust to health stresses such as chronic illnesses, social and economic barriers to health. Students can cope with these health pressures and identify their requirements in order to find solutions to their difficulties with the help services of school health (CDC, 2015).

Children's mental health and other types of interpersonal violence, together with chronic diseases, may have negative effects not only on the academic performance of children but also on the future health and well-being of the pupils. The school health team's services may require additional attention in some areas, including: mental health; the prevention of injuries; assistance for students who have chronic diseases; the prevention of violence; and referral system (CDC, 2017).

A review of history reveals that the awareness of the need for a health service for school-aged children began quite early and has spread all over the world. As a result, most countries have initiated some form of school health program, and the state of these programs, however, varies from country to

country, depending on certain characteristics of each country (Toma et al., 2014).

In school health services, quality assurance is a critical component, as is accurate reporting and statistics on the structure, providers, and students' happiness. The process of providing healthcare should incorporate quality assurance in a significant way and remain to encounter the demands of providing more ongoing school health services (SHS) to today's pupils. The best school health care will continue to protection and enhance the health and safety of kids who place their confidence in them., as well as ensuring that all students receive appropriate referrals to health care providers (Frank *et. al*., 2020).

Therefore, Quality defines "what is necessary and how it may be attained." It also entails consenting to the requirements and propriety of actuality used. Also quality is defined as suitable execution (as measured) of intercessions that are recognized to be safe, moderate to the overall population being served, and capable of reducing mortality, bleakness, disability, and ill health (Latha, 2015).

The quality assurance is a kind of control that involves tasks such as evaluating, monitoring, and regulating services provided to customers. The goal of quality assurance in nursing is to provide a product of a high standard that is capable of doing its intended function. Since quality assurance is beneficial to all members of the business, it is ideal for everyone to participate in it. Quality control, on the other hand, provides staff with feedback on their present level of care as well as suggestions for how to enhance it. Because staff nurses are the individuals who provide direct patient care, they are in an excellent position to evaluate the impact that nursing practice has on patient care.(Khalifa & Sa’adoun, 2010).

Quality Assurance is a concept that examines the quality of healthcare in terms of a well-structured system, process, and outcome. Establishing standards or norms that are based on best practices, monitoring compliance, and selecting service providers who fulfill criteria are all components of quality assurance (Leisher et al., 2016).

Also, the quality assurance is the collection of exercises that are conducted to establish models, screen, and improve execution in order to ensure that the supplied treatment is both effective and safe to the greatest extent feasible (Brown *et. al*. ,2013).

All society that undertakes to preserve and improve the quality of care would be included in a worldwide definition of quality assurance. Quality is, by all accounts, a rejuvenating factor for the general population in all places (Tindall and Stewar, 2007).

All measures performed to improve health care are included in quality assurance. It refers to actions such as evaluating, filtering, or managing the services that are offered to clients. The goal of value confirmation in nursing is to ensure a high-quality item that fulfills its intended function. Quality control informs employees about their present level of quality and in what way it may be enhanced (Marquis and Hustong, 2010).

Therefore, quality assurance (QA) is a continuous process that includes a series of activities for improving and maintaining an optimal level of quality in health care services. These activities include, among others, setting standards, communicating standards, developing indicators, monitoring standard compliance, and solving problems through a team approach (Wandersman et.al., 2012).

Quality assurance was introduced to primary healthcare facilities during the decade of the 1980s in both Europe and in the United States. After 1985, the

World Health Organization (WHO) and other initiatives began evaluating the quality of health care using methodologies analysis and simple assessments (Brown *et. al*., 2008).

1.2. Importance of the Study:

According to the statistics of the Iraqi Ministry of Health, school health services are considered important and essential because they servs a large segment of society Approximately 51% of the population are of the age group under the age of fifteen, and therefore, approximately (1/3) of the population in Iraq is provided with school health services (Al Hilfi. 2013).

According to the annual standards of Ministry of Health in Iraq for academic year 2012-2013 in Babylon governorate, the students who suffer from communicable diseases in primary schools were (17.3%), and non-communicable diseases were (82.7%) from total of students who were checked (6791) (Manthor. 2014).

Despite the fact that the health system in Iraq has a specific and clear guideline on school health, and its implementation in schools, the majority of these guidelines are not followed strictly, and there was a poor follow up on the implementation of these guidelines (Dhia Al-Deen *et. al*., 2006).

Inability of health care facilities in Iraq to adhere consistently to standard procedures of safe and effective medical care causes the deaths of hundreds of individuals each year, according to the documentation provided by Iraqi health care professionals. The enhancement of normal medical assistance is an absolute need for the public's health. Everyone should have access to health care that meets the highest standards of quality in terms of being safe, effective, patient-centered, timely, equitable, and efficient. Unfortunately, a growing body of research and an increasing number of professionals in the health care industry document a serious issue with the provision of health care in Iraq for instance,

inadequate disease prevention, a lack of referral system, a short consultation time, the absence of clinical standards in the provision of health care, the failure to maintain sanitation in public health care services, the absence of quality control programs in health care centers, and ineffective disease prevention and control programs (Alsamarai & Bashir, 2018). In order to reduce all-cause mortality and disability cases, vital social insurance administrations must provide high quality services (Kumar and Mishra, 2015).

Administrations are concerned with the provision of preventative and promotional services as well as the sufficiency of fundamental health care components. If quality assurance is improved, both customers and service providers will have a higher level of confidence in the services that are being delivered (Leisher et al., 2016).

QA in school health services is viewed as a systematic way to instilling in customers (pupils and students) and health staff the necessity of reaching excellence. Consumers may find the finest health care providers, resulting in high customer satisfaction. Health teams provide services that monitor current performance levels and promote continual development. As a result, if providers do not deliver high-quality services, consumers may lose faith in them and resort to the health-care system only when they are in desperate need of preventative, curative, or promotional treatment. Additionally, quality assurance programs create opportunities for health practitioners to thrive, enhancing their work happiness and community standing. The suppliers of health services are crucial to the quality of health care (Rossi et al., 2018).

Attention to quality assurance is critical to the success of critical human services programs. It promotes trust, improves communication, and fosters a better understanding of collective needs and desires. As a result, if providers do not provide higher administrations, they will lose the trust of the population, and customers will turn to the health-care system only when they are in severe need

of medical help. Likewise, quality assurance projects give health care professionals the chance to go above, increasing their job satisfaction and standing in the organization. Moreover, essential social insurance services may be possible to be improved through quality assurance without the need for additional supplies, calculated assistance, financial resources, or human resources (Brown *et. al*., 2013).

The current focus in health-care services is on quality assurance. There is emotional increase in regard to an excitement for quality assurance by way of pertains to social insurance during the last 10 years. A world health organization working group on quality assurance identified four groups of reasons: financial, societal, political, and expert. As a result of each of these factors, quality assurance is now an integral component of social insurance systems. Directors, human services practitioners, students, professors, and scientists must all understand and be clearly required in quality assurance procedures for their job (Ellis and Whittington, 2005).

"Because today's children are tomorrow's adults, appropriate school health services are critical for boosting schoolchildren's health and accomplishing learning objectives." Learning achievement is aided by good health. Learning is beneficial to one's health. Health and education are inextricably linked. Can see that our considerable investment in education produces the greatest rewards as we promote health across the world (Byrne, 2015).

Globally, 1.2 billion children enter school age, accounting for 18% of the entire global population, and this number continues to rise (Kuponiyi et.al., 2016).

Children in underdeveloped nations have significant challenges and are more susceptible to illnesses and diseases than their counterparts in rich ones. Appropriate school health services are thus required to reduce these health

issues and economic burdens among students in developing nations (Dhia Al-Deen *et. al*., 2006).

Iraqis have endured years of suffering as a result of several wars, economic blockades, social unrest and anarchy since the War between Iran-Iraq in (1980-1988) and the US occupation of Iraq in 2003. Armed violence causes injuries, deaths, and psychological stress on communities, families, and children in particular. The rise in poverty and poor levels of education and health have had a significant impact on Iraqis' happiness, particularly school-aged children, who account for half of Iraqi population (about 16 million people) (Al-Obaidi *et. al*., 2013).

During the 2015-2016 academic year, the school health services provided in Iraqi service around five million primary school children. Consequently, five million of our children are in a vulnerable age group, and this is the most essential time of their lives. They had visual, auditory, dental, mental, social, and behavioral health concerns that required early detection and implementation of necessary corrective treatments (Central Organization for Statistics, 2016).

The Iraqi health system has a distinct and clear guideline on school health and its implementation in schools, however most of these rules are not fully followed, and there is a lack of follow-up on these guidelines, as has been seen in other countries and recorded by the WHO (Abd Al-Hussain& Baiee, 2017).

In addition, there is some evidence to show that the health care provided in schools are successful, particularly improvements in obesity and physical activity and in the health of sexual and reproductive, self-care among pupils who have illnesses of a chronic nature including diabetes and asthma, quitting smoking, and the prevention and treatment of infectious diseases within the

student body by utilizing several different healthcare services and vaccinations (Mason-Jones *et. al*., 2012).

School health care is a priority for the Iraqi Ministry of Health (MOH), and one of their aims is to provide it to the country's school population, with an emphasis on elementary school students. This finding could help inform efforts to progress SHS and reduce the prevalence of diseases and complications among school-aged children (Abdulla *et. al*., 2018).

As a consequence of this, an interest emerged in evaluating the primary school children's access to the school's health services in relation to a number of factors that are extremely significant. Then according to the results of the previous studies announced and my interest, the current study tries to evaluate the quality assurance of SHS in the primary health care centers. This evaluation focuses on standards for the organizational structure for health centers and schools, health care providers and consumers as an essential and appropriate way to assess the quality assurance of the SHS.

As a result of this, conducting an evaluation of the quality assurance QA as (structure, process and outcome) to the school health services SHS in primary health care centers in the Al-Numaniyah district is of the vital importance and significance in determining the factors that contribute to provide school health services for pupils and in making improvements to those services.

1.3. Problem Statement:

The SHS can enhance equality of the child health by providing pupils with access to services of healthcare they might not otherwise obtain. Pupils who come from families with poor incomes or who are socially the disadvantaged backgrounds have a lower probability of receive healthcare often acquire chronic health concerns. They may experience more chronic stress and fatigue, be hungrier, and have worse eyesight and hearing than other students, therefore

should be evaluation of quality assurance in all components as a structure, process, outcome to school health services in primary health care centers at Al-Numaniyah district.

1.3. Objectives of the Study:

The present study objectives are to:

1. Evaluate the quality assurance of school health services.
2. Evaluate structure standards of Elementary Schools at Al-Numaniyah District.
3. Determine the satisfaction of school principals with primary health care centers toward school health services.
4. Find out the relationship between the components of quality assurance for school health services SHS.
5. Find out the relationship between activities of health care providers and their socio-demographic characteristics.

1.5. Definition of the Terms:

1.5.1. Evaluation

a. Theoretical Definition:

Evaluation is a judgment-oriented approach for a program or service by which the outcome of the health care provider's process can be accredited, and the performance of the staff plan of action can be ascertained, as well as the consumer's responses to the health care provider's interventions and the extent to which the outcome has been achieved (Smeltzer et.al., 2010).

b. Operational Definition:

Is the powerful tool that can be used to inform and support of quality assurance for school health services by result of quality assurance components; structure standard, process standard and outcome standard.

1.5.2. Quality Assurance QA:

a. Theoretical Definition:

A set of standards designed to guarantee that employees within an organization provide products or services of a high quality (Raddam, 2017).

b. Operational Definition:

The extent to which the quality of school health care services may be evaluated using essential quality assurance components, including: Structure standard; such as workplace, material, resources and workforce. Process standard; includes activities and duties of medical and nursing staff who are working in school health units and finally: Outcome standard which include consumers' satisfactions with school health services.

1.5.3. School Health Services SHS:

a. Theoretical Definition:

All healthcare activities provided to the pupils represent in comprehensive health assessment, health promotion, and health education by professionals in the field, such as doctors, nurses, and dentists, in addition to the other members of the health care team. These services are meant to provide health education, first aid, emergency care, management of chronic diseases, and a healthy school environment in addition to facilitating access to resources, referrals, and counseling (Arizona Department of Education, 2017).

b. Operational Definition:

Services that are provided by the health care staff who work in school health service units at primary health care centers to the pupils which include preventive, protective and promotive services.

Chapter Two
Review of Literature

Chapter two

Review of Literature

One of the aspects of scientific research is a review of related literature, which includes information and studies on research problems.

2.1.Theoretical Framework:

The model of Professor Donabedian has developed his viewpoint on the concept of health care quality, and believes that quality of health care is the result of two aspects: the first, the science and technology of health care, and the second is actual implications of that science and technology in real life. Dr. Donabedian was the first health-care quality researcher. The Donabedian model, which proposed a model for the structure, process, and outcome of quality and has been extensively utilized as the framework for more complicated models over the past 35 years, was acknowledged as a simple and fundamental approach of quality measurement (Berwick & Fox, 2016).

The term quality evaluation method, created by Donabedian, examines health care quality in three domains: Structure, Process, and Outcomes. This theory continues to be the prevailing paradigm for assessing care quality today. He addressed all three dimensions equally, emphasizing that they are complementary and ought to be used together in order to provide an accurate picture of the standard of healthcare (Ameh et.al., 2017).

Structure, according to Donabedian, is described as the relatively stable qualities of care providers, such as organizational components, people elements, and program operation. Structure encompasses inputs such as " facility type, resources, and system (such as bulding); qualified professionals, including specialty (such as physical, occupational, and vocational therapist) education, training, and experience; staff-bed ratio; and specialized in the medical and technical equipment for patients". Also Diagnosing, suggesting, and

implementing therapy are all things that providers do. Patients' behaviors include seeking medical help and following treatment guidelines (Allender et al., 2010).

Process incorporates both the technical and interpersonal facets of caregiving and activities of prevention (such as preventing life-threatening conditions and secondary comorbidities), interventions of rehabilitation (such as diagnosis, treatment, and therapy), activities related patient education (such as increasing levels of motivation and collaboration, as well as broadening access to social support, and developing a discharge plan), and further activities in rehabilitation settings (such as admission, enrollment for the first time in rehabilitation, and assessment functional of the patient) are all included in the process of care (Shewchuk, 2010).

Donabedian described outcome as variations that occur as a result of health services, such as enhancements in the knowledge of the patient, health condition, behavior, in addition satisfaction of the patient. Some outcomes, including mortality and morbidity, can be shown, but that outcomes are easy to quantify, but others, such as rehabilitation, satisfaction of patient, physical impairment and social restoration are more difficult to evaluate. Settings of the rehabilitation, outcomes of the patient are evaluated based on enhancement of operational capabilities (including physical, mental, and social functions), as well as the degree of help essential for post-discharge living conditions (Ameh et al., 2017).

The three aspects of care quality that are being discussed are not separate from one another; rather, they are interwoven inside a structure, rather than being determined by just one or two of these factors, the Donabedian model for evaluation of quality considers the comprehensive incorporation of structure, process, and outcome to be the most important factor in determining care quality. Researchers in the realm of health services have investigated the

relationships that exist between structure and result, structure and process, and process and outcome by utilizing the SPO model. When the researcher analyzes the quality assurance of care in all the three domains as opposed to assessing these three criteria separately, that is a more precise evaluation of the quality assurance of care may be obtained (Shewchuk, 2010).

Dr. Donabedian also pointed out that the consumer's judgment was based on how well the health care provider met the consumers' expectations and values. Consumer satisfaction with health providers is defined as the consumer's subjective examination of the cognitive and emotional reaction that occurs as a consequence of the interplay between the consumer's expectations of health providers and the consumer's perception of real caregivers' behaviors and features as a direct result of a concept analysis (Strickland and Dilorio, 2003).

2.2. The School Health Services: Historical Overview

Schools are recognized to have an influence on children's psychosocial development and mental health, since they are a crucial developmental environment for them. An environment that promotes optimal health in the school, as suggested by the American Academy of the Pediatrics (AAP), is the one who guards from harm pupils and school staff from immediate damage or disease and encourages preventive actions and attitudes against established risk factors that has the potential to cause an illness or disability in the future. Cancer and other diseases may not manifest themselves until later in life, but a healthy school environment may directly benefit pupil's health and learning, contributing to the formation of healthy individuals who are skilled and successful members of society. Furthermore, schools serve as role models for the community; children who are taught about the connection between their health and their surroundings will be able to realize the importance of this connection and avoid

potential dangers to their own health in the houses they live in (Al-Taee and Al-Tuhafee , 2012).

WHO has said that the school denotes the most social agents or organizations that have the rights and means to collaborate with each and every person helps them lead a healthier and socially responsible lifestyle. Coordinated School Health (CSH), is a program that has been thoughtfully developed to integrate educational and healthcare services such as (physical, emotional and social). By supporting families, communities, and schools that collaborate, this integrated approach enhances children' health and capacity to study. The work of the office of coordinated school health and several partners addresses the school health priorities. A coordinated school health model is an eight-part system for connecting health and learning. This strategy involves a systemic transformation that improves pupils' health and capacity to study via the promotion of individual responsibility and the provision of support from families, communities, and educational institutions. In accordance with the recommendations made by the Institute of Medicine in 2005, a comprehensive school health program refers to a set of initiatives designed to foster students' mental, behavioral, and physiological health during the course of their schooling (Oghenewogaga and Margaret, 2014).

At the state level, primary schools are responsible for ensuring a healthy and safe learning environment for pupils. Pupils’ brains and bodies are kept awake and healthy in a healthy school atmosphere. Children, teachers, and staff might become unwell or have their symptoms worsened as a result of poorly maintained school. As a result, there are more absences, missing assignments, and worse exam scores. Students and adults' health and productivity can be improved by schools that foster healthy settings (Washington State Department of Health).

There are many different programs that serve to the health concerns of pupils, and school nurses play an essential part in making sure that these requirements are met. These programs are divided in to three different categories, they essentially correlate to the three different practice objectives of community health nursing, and that are illness prevention, health protection, and health promotion respectively (Hunt, 2009).

The school health services, abbreviated as SHS, are an essential component of the overall school health program, since they seek to keep students' health in good condition. Early detection and identification of illnesses are possible thanks to effective school health services (Akani and Nkanginieme, 2007).

Schools offer pupils a learning environment as well as opportunities for social growth. Schools, being social institutions, establish societal values and educate students important to enable them operate in their setting (Pellegrini, 2007).

As an integral component of a successful school health program, school health services are an absolute necessity, guarantee that pupils are healthy and able to study at all times, and they are a necessary component of attaining the "Education for All" (EFA) Act, which includes children with special health needs. School health services provide preventive and curative treatments to children and employees within the school context. The goal of SHS is to assist students in maximizing their health in order to get the most out of their time in school. School health services such as health evaluations, protection, and promotion are provided by a school health team comprised of doctors, school nurses, school employees, and other specialists. All school community members have access to health services (Elywy, 2016).

A royal ordinance was passed in 1837 in France that it was the responsibility of the school administration to "supervise" the health of the students and to make certain that the schools were kept in a hygienic state. In 1874, a physician was appointed in Brussels, which was the first city to implement a school inspection system. France was the first country to ensure healthcare inspections (Nadine and Mary, 2005).

In 1890, physicians and nurses were engaged in Boston and New York to evaluate pupils in school and screen out any potentially communicable diseases (Abd Al-Hussain, 2015).

In England, school nursing began in 1892. Miss Amy was the first school nurse in London, and she was selected as the Queen's nurse supervisor (Nadine and Mary, 2005).

Between 1920 and 1950, school health involved health exams for detecting health issues (hearing, vision, and scoliosis), as well as minor injuries and referrals for diagnosis and treatment (Lear ,2015).

Efforts were aimed towards psychological health counseling in schools in the 1970s, through the advent of school nurse practitioner programs. School-based and school-linked clinics were established in 1990, In the year 2000, comprehensive primary, secondary, and tertiary health care was made available to children through school nurses. This included care for the entire family as well as the community (Schacht-Fairchild *et. al*., 2010).

The idea for the school health program originated from the Joint Program of the United Nations for the Health of the Population (2008-2009). That program, as its name implies, necessitates collaboration between two sectors: health and education. Although there is no overall methodology, a sum of United Nations (UN) agencies have reinforced specific domains of the school health program (Khalid, 2017).

The health services at the school became evident that the school needed to think about more than just school health services; it also needed to think about the school environment and health education, purpose of the SHS was to allow every pupil to achieve their full potential as a student and a productive part of the community. The development of physical, mental, social, and emotional well-being was a key goal of school health services (Education Encyclopedia, 2014).

There are a great number of national and international organizations that have years of expertise, and many developed nations have made school health programs an essential component of their educational systems. The foundation of the school health program consists of two primary components that are intimately connected to one another: the first is the relationship between efficiency of educational system and student health; and the second is the state's responsibility to provide a healthy environment for children's physical and mental development in order for them to take their place as key components and producers of the future community. Students may make a difference by spreading hygiene and health information and spreading awareness, particularly to their family and friends. This performance is also known as the student-to-student dissemination of health care and disease-control information and the student-to-community dissemination of the same (Elywy, 2016).

Many people who advocate for public health believe that in places where individual healthcare is still the primary and most prominent emphasis of school health services, there should be a transition toward a multidisciplinary approach and proactive service that specializes in the enhancement and assessment of group preventative actions based on an awareness of the demographics of the pupil’s population and a typical estimation of the tasks (Wolfe *et. al*., 2013).

2.3. School Health Services' aims and Objectives:

The School Health Service, sometimes known as SHS, is an essential component of primary care for children. SHS is defined as healthcare services offered to join students by professionals of healthcare including personnel employed in social work and health visiting personnel, counselors, in addition to dental hygienists and psychologists regardless of the location of service delivery. The services should be prescribed by a legal agreement between the educational institution and the provider of the healthcare (Baltag & Saewyc, 2017).

The aim of SHS is to protect, promote, maintain, and preserve the health of the school community, especially pupils and to avoid morbidity and mortality among them. Whereas the following objectives exist:

Educate children, parents, and teachers on the importance of good health, make a healthy and secure learning environment for pupils. Avoid and activate the referral system for communicable and non-communicable illnesses. Include teachers, students, and their parents in the planning of school-related health issues. provide health information and instruction on many areas of healthy living in the classroom, at home, and in the community (Abd Al-Hussain, 2015).

The SHS can enhance equality of the child health by providing pupils with access to services of healthcare they might not otherwise obtain. Pupils who come from families with poor incomes or who are socially the disadvantaged backgrounds have a lower probability of receive healthcare often acquire chronic health concerns. They may experience more chronic stress and fatigue, be hungrier, and have worse eyesight and hearing than other students (WHO. 2021).

The School Health Services must adjust to the changing health goals of students, employ a more comprehensive approach perspective, and expand their

actions elsewhere routine screening and immunization procedures. Also, in the realms of mental health, cigarette use, and control alcoholism, there are reviews demonstrating the existence of successful therapies. Additionally, sexual education and other programs concentrating on contraception, preventing unintended pregnancies, or dating violence have had promising outcomes (Michaud *et. al*., 2021).

2.4. Quality Health Care:

The concept of quality refers to "a level of magnificence". Making the best choices, appropriately" is the simplest definition of value, and it represents the creator's two significant parts of care: content (making the greatest option) and processes (doing it well) (Bornstein, 2010).

Different techniques can be used to assess the nature of medical services. More than blunder-free social insurance is implied by high-quality human services. It also entails providing appropriate healthcare service administrations, achieving ideal client outcomes, and effectively using resources (Jane and Kun, 2006).

Delivery of quality care at every practice level and every setting.The responsibility of nurse leaders and managers is to maintain an adequate quantity and composition of nursing personnel at all times. The process of staffing is difficult because it affects a nurse's ability to offer safe and effective care at all practice levels and in all settings. Respect for nurses' rights; verification and tracking of nursing staff licenses; understanding and adherence to federal, state, and local requirements on staffing and scheduling; upholding nurse practice acts (Murray, 2022).

Quality in social insurance refers to how well-being administrations for individuals and the general public rise the probability of desired health outcomes and expectable based on present expert data (Ellis and Whittington, 2005).

It's also how well the resources for human services, as well as the administrations that are a part of medical services, fulfill the required standards. At least once a year, all health centers should evaluate the quality of the services they provide (WHO, 2010).

Avidis Donabedian has a multifaceted understanding of the specialized and relational parts of value human services, in addition to the link between structure, process, and outcome. The physical manipulation of material objects is dealt with by the specialized portions of our mind. Donabedian's other quality-dimension categorizations-structure, process, and outcome-are widely used and, unfortunately, misquoted. Structure, for example, is commonly interpreted to refer to the resources available in the healthcare system, for example the quantity and kind of healthcare personnel, the facilities and equipment available, the materials provided, and, ultimately, the money spent on ongoing care. Process is easier to define. It indicates to the actual transport of care from the standpoint of patients, first indicating a desire to be evaluated for possible treatment (or to be certain of being maintained). It includes access, discovering, treatment interventions and their administrative and specialist assistance, education and exercises among other things. Finally, outcomes might be defined as the end products of treatment. They include health state, capacity changes, life duration, comfort, and, most importantly, personal pleasure (Raddam, 2017).

Nurses, clinicians and administrators at hospitals are continuously confronted with new technologies and methods, which need adjustments to the standardized processes and practices of their jobs. Having quality procedures in place can make it easier to achieve alteration while preserving high standards of care. The works of Donabedian have inspired a whole new paradigm for quality assurance systems that consists of three components: “structure (resources and administration), process (culture and professional co-operation), and outcome (competence development and goal attainment)” (Kunkel et.al., 2007).

2.4.1. Characteristics of Quality Health Care:

The agency and its employees' values are reflected in the quality assurance program. Everything that has an influence on the agency and the customers services must be considered in such a program. A quality community health program must have the following six features: Is comprehensive and addresses all of a persons or community's interconnected health requirements. Exhibits organizational competence and works inside a well-managed and financially healthy corporate structure. Indicates professional competence as well as a desire to create an environment that promotes personal greatness among capable employees. Is accessible and indicates that, despite any financial, cultural, emotional, or geographic obstacles that may exist, its services are easily available to its clients in a timely way. Is effective and indicates that it makes the greatest possible use of existing and, at times, restricted resources. Is successful and displays that it is concerned with the beneficial effects of clients' health condition as evaluated by client outcomes, client satisfaction ratings, and the client's ability to return to the same program when required. (Manthoor, 2014).

2.5. Standards:

A standard is a law, a written assessment of a degree of performance or a set of circumstances that is predetermined and well-meaning. A standard is a set of values that has a specific meaning (Lampe, 2014).

Benchmarks are the most important factor in ensuring that quality is consistently improved. The performance of critical social insurance services can be measured against predetermined benchmarks. A set of requirements for primary health care centers has been proposed in order to offer the best possible level of health care. Standards must be used to specify quality. In order for employers, patients in addition providers themselves to be confident that these

needs will be satisfied, there will need to be some kind of system in place, and that system will need to be managed, regardless of its size or breadth. Every health care provider, administrator, director, and support person will be aware of what is expected of them (Young & Smith, 2021).

2.6. Quality Assurance for School Health Services:

Quality Assurance (QA) is a planned and systematic process that ensures that a product or service will meet specified quality standards (Medical Dictionary, 2012).

Quality assurance efforts include initial setting of standards, formal auditing, and peer review in which peer professional use an organized system to assess the quality of care being delivered. It includes methods of ensuring that quality care is being delivered through the use of the following three phase process: comparing a health care situation with pre-established criteria believed to represent quality care; identifying care strengths, deficiencies, and opportunities for improvement; and introducing changes in the health care system (Allender et.al., 2010).

There are a few characteristics that are common to all definitions of quality assurance. for example, relates to a deliberate, ongoing process aimed at improving performance while also employing data, either explicitly or implicitly. The purposeful strategy of passing on the value of splendor to people and groups is known as quality assurance. It equips the health-care community with tools that measure current performance and stimulate continuous improvement (Brown *et. al*., 2008).

Quality assurance is a more detailed process to quality management. Quality assurance considers the producer–provider, product–service, and consumer perspectives in the context of a structure–process–outcome system (needs, rights and inclinations). Quality assurance is a process that aims to

improve the outcomes of all social insurance programs in terms of health, practical capability, as well as the prosperity and fulfillment of those who receive human services. Its necessary structures and data sources and aids in the dismantling and rebuilding of administrative conveyance methods as well as the measurement of results (WHO, 2012).

The approach to quality assurance can be related to offices, projects, frameworks, and segments, and can be recognized by its consistency with measurements. Among the measures were the formation of rules, formal examination and an audit of an associate in which a peer specialist use a standardized outline to evaluate the quality of medical services provided. It covers ways for ensuring the delivery of quality care utilizing the three-step procedure described below: Contrasting a human services scenario with pre-established criteria thought to speak to quality care; identifying care characteristics, inadequacies, and growth opportunities; and provoking modifications to the social insurance system. However, quality assurance is also linked to external instruments that contribute to illustrating, observing, surveying, outlining and enhancing the nature of medical services, such as developing and disseminating principles, determining conformance to standards, and employing quality management techniques to continuously improve the quality (Allender and Spradly, 2014).

2.6.1. Benefits of Quality Assurance

Everyone benefits from QA: the consumer, group, experts, the supervisors and establishment in the health sector. Customers benefit from value affirmation in a variety of ways, including better health outcomes, customer satisfaction, value for money, and reduced disappointment. Quality assurance also benefits health-care providers in the following ways: health-care employees are happier with their jobs, health-care specialists have a better understanding of

patients, data flow among employees is improved, and health-care employees who do well are paid. Patients will be happier with our services, more patients will use our services, the environment will be cleaner and more pleasant, and the office will have a good reputation (Raddam, 2017).

a. Benefits to the Health Institution:

The following are some of the advantages that quality assurance gives to the health facility:

- Patients are more satisfied with the services.
- More patients may be able to benefit from these services.
- The environment will be made more attractive and cleaner.
- The institution will have a positive image (Manthoor, 2014).

b. Benefits to Healthcare Providers:

Quality assurance also benefits healthcare providers in the following ways:

- Health care workers are more satisfied with the job.
- Health professionals have a greater understanding of patients.
- The flow of information among staff has improved.
- Employees in the health care field who do well are rewarded.

c. Benefits to the Clients:

The following are some of the advantages of quality assurance to clients:

- Better healthcare outcomes.
- Satisfaction of the client.
- Exceptional value for money.
- There is less aggravation (Manthoor, 2014).

2.6.2. Quality Assurance Components for School Health Services:

The main quality assurance components have frequently divided into the following three basic categories: Structure: resources, both human and inanimate, necessary for the delivery of healthcare; these resources are required (focus review resources and organization structure). Process: methods, behaviors, and strategies (focus on standards of medical and nursing care). Outcome: results that can be measured, which serve as a better gauge of success than either the organization's structure or its processes (focus on the consumer's satisfaction regarding to care). (Young & Smith, 2021).

2.6.2.A. Structural Standards:

These terms refer to the adequateness, both quantitatively and qualitatively of information sources and assets (human and material, such as the capabilities, number and experiences of health providers at every level of a system for providing social insurance). Basic models also refer to how the available assets of vital medical services structures are organized out and managed, and determine the ability of that offices to deliver high-quality treatment or services, require the existence of essential policies, principles and instructions, sets of duties and procedural that govern the activity of different units of each of the primary healthcare in which conveyance levels gain from the services. Similarly, the quality of vital health care is heavily influenced by the resources available and how they are used. Assets may be classified into four categories in vital social insurance: human resources; physical assets (offices, structures, equipment, supplies, and vehicles); financial assets; and data and technical assets (Al-Assaf, 2004).

Structure aspects of quality provide a basis for quality health care by determining which structures need to be present in a health care system in order to provide quality. This provides the framework for better health care in the

future. In which the elements of structures include things like a well-built primary health care facility, standards of the quality health care for the patient, quality personnel policies, and environmental standards, among other things. Structure elements that contain the following standards*:* (Young & Smith, 2021).

2.6.2. Resources

It is generally agreed that health resources are necessary for the operation of the health care system. These include,

- A health personnel, who make up the staffs who manage the system.
- Structures, that are used to deliver healthcare to patients.
  such as primary health care facilities and other building components.
- Health instruments and materials (Abdulla et.al., 2018).

a. Personnel (School Health Team):

People are an essential health resource; health professionals demonstrate a wide range in education, skill, and practice settings.

- **Medical Staff:**

A medical doctor professional in school health who works with one hundred thousand pupils in the surrounding region Each center should have at least (2) doctors and a trained dentist on school health who work with (10,000) pupils within the geographic region to be at least one (MOH, 2015).

The school physician performs a significant task in directing the procedures and policies of the school healthcare offered at school, including the following responsibilities: Making contributions to the creation and modification of school health programs, safety policies and procedures, as well as the preparation of a

school region's approach for dealing with emergency situations. Offering professional medical assistance to the school administration, school nurses, and any other school health committees that may be present. Discussing concerns of the school health with the school nurses during the meeting. Contribution to the overall on topics such as school health concerns, for example (health education and mental health). Efforts being made to strengthen ties between community medical professionals and school administration. Giving support to health programs in schools. Providing health care providers and the community with an explanation and interpretation of the function that the school health team. Providing the school council with the necessary information on health-related concerns (Abdulla et.al., 2018).

- **Nursing Staff:**

On the basis of their focus on the client, community health nurse responsibilities are often classified as client-oriented roles. The community nurse works with populations that have special needs, hence their tasks vary depending on the populations they serve. Depending on the context and location, some nurses may assume several tasks and responsibilities, whilst others limit their actions to a handful (Manthoor, 2014).

According to the "National Association of School Nurses (NASN)" school nursing is a specialized practice of professional nursing that supports the health of students, teachers, and other school personnel. Therefore, promote the health statues, academic achievement, and lifetime success of children (NASN, 2015).

There must be at least two (2) school nurses per twenty-five (25) schools in a certain geographic region who are trained in school health (MOH, 2015).

Students who have special needs or who have complex medical conditions require lower pupils-to-nurse ratios, the exact value of which is assessed on a case-by-case basis (National Association of School Nurses, 2015).

The staff in the public health sector is, by far and away, the most important component of the public health infrastructure. Consistent with the principles inherent in the core functions and fundamental services of public health, the personnel who are responsible for carrying out the responsibilities to make up the workforce in public health (Bernard, 2012).

Inadequate performance is the consequence of insufficient personnel or of personnel who do not provide care in accordance with standards or who are unresponsive to the requirements of the pupils. Most performance issues stem from incorrect expectations, a lack of skills, inadequate resources or equipment, or a lack of motivation (Lannes, 2015).

Inadequate performance on the part of service providers results in inaccessibility of healthcare and incorrect care, which is turn contributes to a decline in health outcomes when individuals refuse services or are mistreated owing to harmful practices (Daneshkohan et.al., 2015).

The gap that exists between this benchmark level of health worker availability and the current level that is considered to be a shortage in health worker. The availability of health workers refers to the number of people who are both trained and employed as health workers in order to deliver health services. The shortage in health workers involves three concepts: first, deficiencies in the health workforce brought about by an inability to train a sufficient number of healthcare professionals; second, a deficiency in the number of health care professionals who, although having the necessary education, are not yet prepared to work in the health system and third, an insufficient number of available jobs for health care professionals (O'Brien and Gostin, 2011).

b. Health Care Facilities

Health care facilities embrace a varied category, from small and relatively simple medical offices to big, complex, and costly, research and teaching hospitals. The past version, "You never get a second chance to make a good first impression" applies to health care facilities. The facility sends a message to clients, patients, volunteers, providers, and staff, and it convey many clues about the organization and influences employees' attitudes and behaviors. Finishes and artwork must be carefully selected, well- coordinated, and integrated. The health care facilities design is influenced by considerable principles and technical requirements. It is also influenced by other less defined needs and pressures and the most important of these are staff shortages, payment of imbursements, malpractice insurance, doctors-facilities relations, capability, caring of uninsured clients, technological evolution, client's safety (Robert, 2017).

The main objective of designing of school health facilities appropriately is to provide well and safe environment that excellently and efficiently meets the student's health needs within the school setting. The capacity of the facility to provide confidentiality, technology, suitable supplies, modern equipment, and storage can make either access or a barrier to early and fruitful interventions (Abdulla et.al., 2018).

c. Equipment and Supplies:

School health equipment and supplies are important part of health resources, and includes all materials used in diagnoses and follow-up of student health such as length and weight scales, Snellen Eye chart, hearing examination tools, medical supplies and laboratories materials (Robert, 2017).

2.6.2. A. Organization Structure:

The organizational structure and financial stability of the agency should allow the mission statement or philosophy to be realized. The agency should be client-focused, with sufficient resources to maintain present services and introduce additional services as needed. Public agencies need to operate within budget and also have a well-developed system of acquiring additional funding for new services through grants and contract expansion. Private agencies should operate efficiently enough to realize a profit that encourages the owners and boards of directors to continue to support the services. They should look for additional ways to solicit clients in addition to employing highly motivated and qualified staff (Allender and Spradley, 2014).

In the health care, structure significantly influences function, determines how good or resources are acquired and how services are dispersed or provided. Process elements of quality build on the structure elements and take quality a step further. Process elements identify what nursing and health care interventions must be in place to deliver quality. Process elements are such things as managing the health care process and utilizing clinical practice guidelines and standards for nursing and medical interventions (Maurer and Smith, 2015).

There is evidence that greater integration of primary and social care services provides benefits to the local community, customer focus greater emphasis on putting patient need, such as convenience, accessibility and clients comfort, and building services design criteria which include (Longhdon, 2006):

a- Ventilation: for general areas, a single fan motor is acceptable for dirty areas or WCs, a separate extract system providing 10 air changes per hour is required. The ventilation system should be controlled with a building management system.

b- Lighting: 300 lux lighting level for the general rooms with adjustable task lighting to provide 400 lux for treatment areas and solar shading passive solar inputs and the desire to provide as much natural light as possible.

c- Water Supply: cold and hot water.

d- Security of the building should be equipped with an intruder alarm system.

e- Health care waste (HCW): Is defined as the total waste stream from a health care facility that includes both potential infectious waste and non-infectious waste materials.

2.6.2. b. School building:

Is one of the most important elements of the educational process. It is an important factor in its success and increase the level of scientific performance of the students, whenever the school building is suitable and equipped with all the means of comfort, the positive effect will be on the whole educational process. and in the same context, there are several determinants of help to improve the environmental performance of the building and check adapted to the building with the surrounding environment without damaging the building or the environment with the convenience of individuals, which result in knowledge of the requirements the design and trying each side is interested in developing an ongoing basis (El-Baz et.al., 2018).

Schoolchildren's health depends on having access to clean water to drink, enough water for hygiene, proper sanitization facilities, clean air to breathe, safe and healthy food, and a secure environment in which to learn and play. Health issues can be brought on by or made worse by a polluted environment. These include transient health consequences such viral disease, respiratory infections,

and asthma that might impair learning capacity and school attendance. On the other hand, a healthy school environment can directly improve children's health and effective learning and thereby contribute to the development of healthy adults as skilled and productive members of society. Health effects such as cancer or neurological diseases may not manifest themselves until much later in life, Schools also serve as role models for the neighborhood; pupils who learn about the connection between the environment and health will be able to identify and minimize health risks in their own homes (Abd-Alhameed & Al-Taee , 2012).

Air quality in school buildings is very important for staff, teachers, and students. More than 53 million children and 6 million adults spend up to 6 to 8 hours in school each day. In particular, children are at increased risk for a variety of reasons. Young children are more likely to spend time on or near the floor where toxins are likely to settle and use more hand-to-mouth behavior, and they take in more air per size than adults. While exposures can be the same as in the home, those who attend or work in schools are in the same air environment for 6 to 8 hours or more where they are exposed to the toxins for long periods of time. Nurses who work in the school setting can access information through the Environment Protection Agency (EPA) Web site to aid in assessments and interventions to improve air quality in schools (Allender et.al., 2013).

2.6.2. A.2.1. School Health Services Standards:

European framework for quality standards in school health services and competences for school health professionals, developed by the WHO Regional Office for Europe, aims to support the 53 Member States of the WHO European Region to develop and sustain SHS as part of their national health systems. The framework, which is focused primarily at national and regional-level policy-makers responsible for SHS standards and service quality, can be

adapted by individual countries to enable them to develop SHS that reflect health priorities and health systems. The national standards should support SHS managers and experts to develop and maintain quality services that meet children and adolescents' health needs and support institutions that train SHS professionals in developing specific curricula (World Health Organization, 2014).

The main quality standards are as follows:

- **Standard 1:** an intersectoral national or regional normative framework involving the ministries of health and education and based on children's rights is in place to advice on the content and conditions of service delivery of SHS.
- **Standard 2:** SHSs respect the principles, characteristics and quality dimensions of child- and adolescent-friendly health services and apply them in a manner that is appropriate to children and adolescents at all developmental stages and in all age groups. Principles of accessibility, equity and acceptability also apply to the way in which SHSs engage with parents.
- **Standard 3:** SHS facilities, equipment, staffing and data management systems are sufficient to enable SHS to achieve their objectives.
- **Standard 4:** collaboration between SHS, teachers, school administration, parents and children, and local community actors (including healthcare providers) is established and respective responsibilities are clearly defined.
- **Standard 5**: SHS staff have clearly defined job descriptions, adequate competences and a commitment to achieving SHS quality standards.

  Rooms and equipment: Rooms comply with existing environmental and cleanliness norms (including standards for dimensions, lighting, ventilation, heating and location).and equipped with sufficient furnishings

and equipment to facilitate state-of the-art service provision. Room structures reflect the need to safeguard students' right to privacy and confidentiality. Emergency medications are stocked and properly managed (Jansen et.al., 2019).

Staffing: The number of staffs is in adequate ratio to the number of students and to the workload set out in the service package and defined by the national framework and goals. Health staff are employed explicitly to provide the service package within the framework of a SHS. Staff have access to time allocated for their own professional development, clinical supervision and research activities. SHS staff are adequately paid. Data management systems user-friendly electronic devices for managing health records and promoting communication are easily accessible. and Written, up-to-date educational material is in place for students and parents (World Health Organization, 2014).

- **Standard 6:** a package of SHS services based on priority public health concerns is defined, supported by evidence-informed protocols and guidelines. The service package encompasses population-based approaches, including health promotion in the school setting, and services developed on an approach based on individual needs
- **Standard 7:** a data management system that facilitates the safe storage and retrieval of individual health records, monitoring of health trends, assessment of SHS quality (structure and activities) and research is in place. Additional specifications are listed below, where appropriate (Jansen et.al., 2019).

2.6.2. A.2.2. Organizational Model of SHS:

A basic organizational model of SHS that shows in **Figure (2.1)**. key stakeholders involved in SHS programming. From national to local levels, it is important that SHS are led through close collaboration of the health and

education sectors. Collaboration between the health and education sectors is ideal for implementing all pillars of health-promoting school, but to effectively provide comprehensive SHS, genuine, close collaboration of the health and education sectors is critical. In addition to the health and education sectors, other sectors also can play a valuable role in policy, planning and financing at national level, including other government ministries (such as social services, and water and sanitation), the private sector and NGOs (World Health Organization, 2021)

SHS can be implemented through different structures at local level. Most commonly, they are school-based health services – that is, services provided by on-site health personnel only, by both on-site and visiting health personnel or by visiting health personnel only. However, SHS may also (or instead) be provided through school-linked services; these are SHS that are not physically located within the school but are provided outside of school premises (at primary care facilities or community centers, for instance). Trained health workers (like nurses, clinical officers, doctors, medical assistants, physical therapists, dentists, psychologists and counsellors) are expected to be the main SHS staff. They should work closely with education sector staff (including school principals, administrators and teachers) and staff from other parts of the health and social services (such as primary health care, specialist services or social workers). In addition, they need to communicate directly with parents to coordinate a student's care related to, for example, referral and follow-up (Baltag et.al., 2015).

The primary beneficiaries of SHS are students/ learners. In addition, students and their families can help to inform and monitor SHS through participatory research and other activities (WHO, 2021)

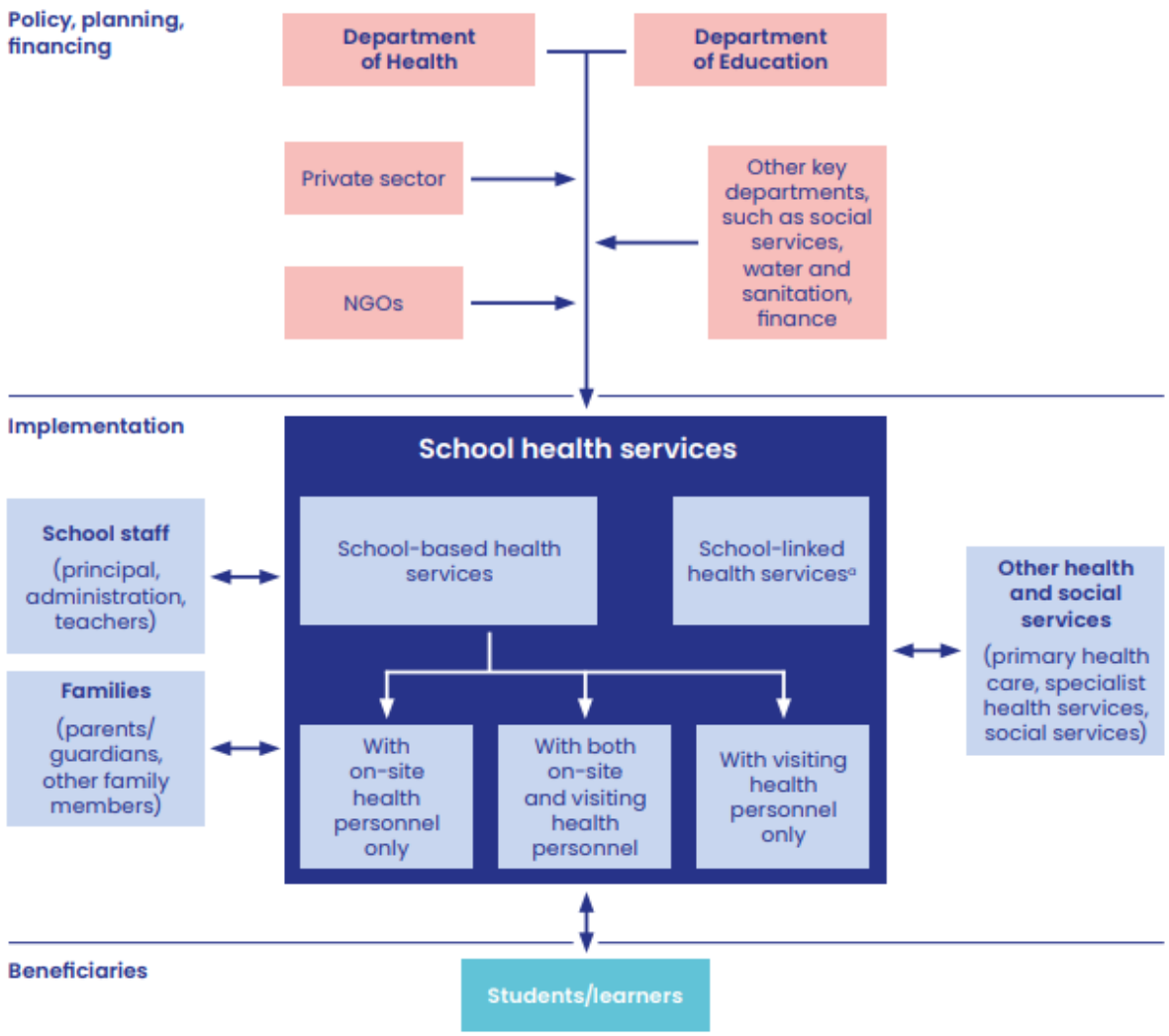

Figure (2.1). An organizational model of SHS

2.6.2.B. Process Standards:

Process models apply to what we do in terms of care and administrative exercises. Details about administrations to be provided throughout the prenatal period are examples of process markers. Process measurements are frequently used to describe the most appropriate and institutionalized game plan for certain circumstances, with the purpose of reducing variation in health administration support and clinical practice, and therefore improving the execution and competency of social insurance (Al-Assaf, 2004).

The staff is encouraged to contribute to the evaluation of the standards and revise them as needed. Staff members need to keep themselves current by attending in-service training sessions and acquiring additional education appropriate to their job requirements. The staff members work collaboratively with others across disciplines to improve the quality of care given in the community. A system of quality review is in place, and each staff member contributes to this process as a member of a peer review committee or quality assurance committee. Staff members also listen to clients and provide an outlet to evaluate the care received (Allender and Spradley, 2014).

Process measures focus on whether the activities within an organization are being conducted appropriately. Process measures focus on the behaviors of the providers. They relate to what the care provider will be doing and the process the care provider should follow to assure quality of care. Process standards look at activities, interventions and the sequence of caregiving events. Typically, they are assessed by an audit (Heidenthal, 2004).

2.6.2.B. 1. School Health Team:

The school physicians, nurse and teachers must collaborate constantly. Other health team members, such as counselors, health educators, health coordinators, psychologists, athletic directors, speech therapists, occupational therapists, physical therapists, food service Personnel, dentists, dental hygienists, social workers, security personnel, health aides, and Administrators, may be present depending on the size and financial resources of the school. All team members, including students, parents, bus drivers, and custodians, have a specialized role complementary to that of the school health. Consultation and referral between team members are crucial to the successful implementation of the school health program (Manthoor, 2014).

- **Roles of School Health Team:**

For many students, achievement, attendance, and graduation are dependent on access to health and safety-related services at school. Certified school nurses are best equipped to communicate with physicians, dentists, and other health professionals; understand student health and safety needs; and educate individual students and their families on health and safety issues (Georgina, 2008).

The school nurse coordinates the activities of the school health services team with the child's primary care physician and/or with the

school-based health center to provide continuity of care (American Academy of Pediatrics, 2008).

The school physician should carry out medical examinations on pupils as necessary and ensure that regular screening of vision and hearing are performed (Manthoor, 2014).

A- Roles and Duties of the School Nurses:

School nurse is the leader in the school community to oversee school health policies and programs. The school nurse serves in a pivotal role to provide expertise and oversight for the provision of school health services and promotion of health education. The school nurse has a crucial role in the seamless provision of comprehensive health services to children and youths (American Academy of Pediatrics, 2008).

The presence of school nurses in schools makes them well placed to take lead of the school system in partnership with school doctors, community doctors and community organizations. They facilitate access to medical aid and the state's child health insurance program to help families and students enroll in

government health insurance programs and can help find a medical home for the student who needs one (Abdullah *et. al*, 2018).

Nurses require special qualities and education to work with the school health team, and it is recommended that nurses should have the following qualification: A sound educational background with minimum of a bachelor degree in nursing. A good understanding of nursing process and the ability to use it in working with individuals, families and health team. Adequate knowledge and willingness to work with other community resources. Effective communication skills. Effective organizational and leadership skills. A sincere nonjudgmental approach to clients (Allender and Spradly, 2014).

The school nurses' roles include the following: Participate in the preparation of the annual plan and periodic meetings of the health unit. Work in clinics and nursing including: take the basic data of the patient, taking biometrics and his recorded accurately (temperature, pulse, respiration) and processing patient to detect and prepare the necessary test equipment. Participate with the doctor in the emergency cases and accompany the patient if necessary. Responsible for sterilizing medical devices and equipment. Responsible for health education activities in school. Participate in the following programs: infectious disease control program, epidemiological survey procedures, medical field program, environmental school health program and vaccination program. Participate in the field of vaccines: ensuring cold chain safety, give vaccinations under supervision of physician, disposal of needles and bottles vaccinations partially used according to instructions. To participate in program of continuing medical education and self- development (Abdullah *et. al*, 2010).

B- Functions and Duties of School Physicians:

Allensworth (2018) indicated that the school physician has a critical role in guiding the policies and practices of health services provided at school, and

these roles include the following functions: Assist in the development/revision of school health and safety policies and procedures and in emergency care planning for the school district. Providing medical consultation to the school nurses, school administration, and school health advisory committees. Meeting regularly with school nurses to review school health issues. Providing consultation on issues of school health; e.g. environmental health, food service, health education. Developing standing orders as necessary. Participating on the school health advisory committee. Acting as liaison between community physicians and the school. Advocating for school health programs. Interpreting the role of school health to healthcare providers and community. Providing information regarding health issues to the school board, as appropriate.

2.6.2.C. Outcome Standards:

Result norms reflect the effects of care on the health of customers and the general public as a result of progression, aversion, remedial and rehabilitative administrations, or interpersonal relationships with specialist care. Value result measures assess particular aspects of well-being and allow for uncomplicated reporting of changes in well-being. They refer to the effects of customer care and administration on their well-being, such as changes in group learning and positive behavioral changes, as well as their satisfaction with their mental health (Al-Assaf, 2004).

Execution standards are specific criteria that are utilized to quantify the outcome of administrative conveyance and the activities that support it. Instead of assisting practitioners and patients, they are designed to assess performance. "Definitive declaration of; least levels of worthy execution or outcomes, amazing levels of execution or results, and the scope of satisfying execution or results," have been described as measures (Ellis and Whittington, 2005).

All school health services provisions should be reviewed periodically to determine whether the standards are meeting the present needs of the students and whether the medical and nursing staff are implementing these standards. (Allender and Spradley, 2014).

The outcomes or results of care (having the right things happen) are the desired effect of the structure (having the right things) and the processes (doing the right things), as described earlier in the models. The focus on consumers outcomes demands continuing analysis of structure and process, because they are these two components that produce desirable or undesirable outcomes. With the focus on outcomes, there has been an impetus to include positive outcome terms such as improved health status, functional ability, perceived quality of life, and consumer's satisfaction. Consumer's satisfaction is measured by how closely a consumers' expectations of nursing care match the perception of the nursing care actually received (Boyle & Baernholdt, 2021).

If the responses indicate that a program is meeting it's goals, maintaining set standards, and having positive consumers outcomes and satisfied students, the program is providing quality care. The goal of care in the community is successful consumers outcomes by starting with measurable indicators (Allender and Spradley, 2014).

2.6.2.D. Factors Influence Outcome Structure are:

1. Consumers

The consumer and health care services should be the focus of the health professions in which the consumer is the most vulnerable component and is the most likely to be hurt by ineffective functioning of the system (Maurer and Smith, 2015).

Health care provider or health care agency consumers choice to use is often based on presumed or assumed caregiving services and the quality of those

services. Health care consumers are provided with many choices when selecting health care services. This competition in the health care marketplace is beneficial to consumers. When consumers are knowledgeable receivers of health care services, they can demand quality care as they define it (Allender and Spradley, 2014).

2. Consumers-Health Care Providers Relationships

2.a. Consumers-Physician Relationships

Consumers-physician relationships change as the physician's typical mode of practice moved from a single, private enterprise to multi group practice (Yoder-Wise, 2003).

2.b. Consumers-Nurse Relationships

Nurses are the healthcare providers who spend the most time with the consumers. These encounters are generally personal and intensely meaningful. Therefore, the nurse is in a unique position to influence and promote positive consumer relationships. The nurse manager sets the tone for effective staff patient interactions with exciting opportunities presented in patient-focused care (Yoder-Wise, 2003).

3. Consumer's Satisfaction

Satisfaction is the desirous outcome of a task or job that pleases one’s esteem. The satisfaction is considered a key for determining the accuracy and innovation of a service or a system performance especially the health care system. As the higher the level of satisfaction is the higher the students' educational achievement will be and the better their skills will be invested (Malik *et. al*., 2010).

Consumers satisfaction is the level of satisfaction that clients experience having used a service. It reflects the gap between the expected service and the

experience of the service, from the client's point of view. Measuring consumer's or patient satisfaction has become an integral part of hospital/clinic management strategies across the globe. Moreover, the quality assurance and accreditation process in most countries require that the satisfaction of clients be measured on a regular basis (Taha & Qassim, 2021)

Satisfaction is the eventual outcome of an institution's administrative as well as educational system's interconnected performance. If the school provides a healthy environment which facilitates education the students will be exceedingly satisfied and encouraged for completing their studies (Malik *et. al*., 2010).

The degree of satisfaction with the service provided represents the difference between what the patient can actually perceive and receive, and what s/he expect to count before the service is purchased. The satisfaction of the consumer is a relative situation and vary from one individual to another and according to the content contained in the service from the point of view of the beneficiary. Satisfaction can be represented in this case as a consumer assessment of the services it receives and from the point of view of the health service provider, the essence of the quality is not limited to matching the service provided with the predefined standards, or providing them with the lowest possible costs, but extended to what the patient needs and what is expected to get. Thus, the quality of health service provided is as a relativity advantage the service provider must employ to enhance its position in the health market (Abdulla *et. al*., 2018).

Principals and teachers' satisfaction are a staff's sense of success and attainment on the work. It is generally perceived to be directly linked to productivity as well as to personal wellbeing. Job satisfaction implies doing a job one enjoys, doing it well and being rewarded for one's efforts. Job satisfaction further implies enthusiasm and happiness with one's work. Job

satisfaction is the key element that leads to realization, access, promotion, and accomplishment of other goals that give the sense of achievement (Kaliski, 2007).

Consumer's satisfaction with health services, therefore, has become one of the important components of providing accepted quality of care. Satisfaction has been said to be a major predictor of use of services, as it is essential if consumers were to utilize services, comply with treatments and maintain a continuing relationship with practitioners (Taha & Qassim, 2021)

Factors leading to customer satisfaction, described as motivators, are promotional and personal developmental chances, responsibility, accomplishment and appreciation. These factors are intrinsically gratifying to the persons. On the other hand, the extrinsic factors, defined as hygiene factors that are leading to job dissatisfaction include payment, physical occupation conditions, job privacy and security, organization policies, skill and manner of supervisors and nature of relationships with others (Robbins and Judge, 2013).

Careless of how superior providers may perceive their own product or service to be, if consumers fail to perceive it to be the needed or wanted services provided conveniently by skilled and knowledgeable people a caring manner at a reasonable cost and consistent with their own culture and value system the organization may fail. Perception, accurate or not, is the key (Heidenthal, 2004).

2.7. Concept of School Health Programme:

Improving the health conditions and process of learning among school children through school- based health and nutrition programmes is not a new concept. At present, most of the developed countries have institutionalized school health programmes as an integral part of their education systems. A number of national and international agencies have decades of experience in this area. School Health Programmes are primarily based on two pertinent premises.

Firstly, the relationship of quality of learning with the health conditions of students, and secondly, responsibility of the state to facilitate smooth physical and mental growth of children for their future role as productive members of the society (UNESCO, 2010).

This type of program helps meet the needs of students, parents, the school, and the community, thus facilitating effective education and positive student outcomes (Carol and Jessica, 2010).

Coordinated school health programs provide policies, activities, and services in an organized manner to promote the health of school students and staff through: comprehensive school health education; family and community involvement; physical education; school counseling, psychological, and social services; school health services; school nutrition services; and school-site health promotion for staff and faculty (Murray *et. al*., 2007).

A Coordinated school health program requires the collaboration of academic staff and agencies, working together to implement these components for students, staff, and families at a given school site or within a given district (Vinciullo and Bradley, 2009).

The primary purposes of the school health component are: to improve national strategies for enabling schools to implement effective school health programs, to provide an efficient mechanism to help articulate and implement the WHO global school health initiative in the world's most populous nations (WHO, 2013).

The schools began to decline as centers for providing primary care to children and the community, the focus of school nursing changed to one of increased responsibility for training teachers and staff in how to meet the needs of these children, the school nurse provided in- service and education for school personnel as needed (Soucier and Janes, 2009).

School health programming is a valuable tool in the quest for high academic achievement for all students. It is enabling the health-related needs of students to be met more consistently; it allows students to enjoy an enhanced capacity to attend to developmentally appropriate issues; and fosters heightened academic success, the cultivation of a community focus on student success through positive health behaviors that will result in schools becoming more familiar to parents, community agencies and citizens. Schools will therefore reap the rewards of enhanced parent and community support, and students will benefit from more efficient use of school and community resources (Manthoor, 2014).

Health-system issues need to be addressed to improve school health services. These issues include inadequate funding, shortage of personnel, insufficiently defined position of school health services in educational institutions and differences between the responsibilities of school nurses and school doctors and family doctors. To tackle existing challenges, there is a strong need to use data on effectiveness to advocate the importance of school health services (Mikhail, 2011).

A number of programs serve the health needs of school-age children and adolescents. School nurses play a major and vital role in delivering these services. Such programs fall into three categories that approximate the three practice priorities of community health nursing practice: illness prevention, health protection, and health promotion as the following (Allender et.al., 2010).

2.7. 1. Preventive Health Programs

A. Immunization

School nurses are deeply involved to provide immunization services at elementary and middle schools. Compulsory immunization laws that vary from state to state have enabled public health personnel to carry out these preventive

services. Although immunization clinics may improve rates of compliance, it is recommended that 11- to 12-year-olds be scheduled for routine visits to their physicians so that immunization can be checked and updated (Jain and Stokley, 2007).

B. Education and Social Services:

Education of school-age children and adolescents includes a wide variety of approaches and can range from the basics of hand-washing for elementary school students to hearing conservation for students who like to listen to loud music. Quality school care services that are easily accessible, provide for clients, are age-appropriate or targeted to adolescents, and are staffed with health care providers who exhibit nonjudgmental attitudes are better able to attract young people who need help. Some argue that drastic changes in the provision of services to young people working to ensure economic development, privatization of prevention activities, and employment of innovative models and strategies are needed to effect change. The programs in reducing use of alcohol, tobacco, and other drugs among adolescents and enforcement of laws that restrict tobacco sales, alcohol and other drugs to minors are another highly effective method of prevention. School nurses often work in conjunction with law enforcement officials, school district administrators, and other community agencies to ensure compliance with local regulations and prevent (Manthoor, 2014).

2.7. 2. Health Protection Programs:

A. Safety and Injury Prevention

Accident and injury control programs serve a critical role in protecting the lives of school-age children and adolescents. Efforts to prevent motor vehicle accidents include driver education programs, better highway construction, improved motor vehicle design and safety features, safety

programs that also seek to protect school-age children from the hazards of poisonings, ingestion of prescription or drugs, product-related accidents (unsafe toys, bicycles, skateboards, skates, playground equipment, and furniture), and recreational accidents, including drowning and sports related injuries. Generally, the school nurse can educate families to recognize potentially hazardous situations and encourage efforts to eliminate them and reduce playground hazards which can contribute to the reduction of school-related injuries (Child Safety Network, 2005).

B. Infectious Diseases:

School health Programs that protect school-age children and adolescents against infectious diseases encompass efforts such as closing swimming pools that have unsafe bacteria counts, conducting immunization campaigns in conjunction with influenza or measles outbreaks, and working with hospital pediatric units to reduce the incidence and threat of iatrogenic disease (Alex and Letizia, 2007).

C. Child Protective Services

Services to protect children from abuse are not as well developed or effective as safety and injury protection programs, for a variety of reasons. Most child abuse occurs at home, so only the most blatant situations become evident to outsiders (Spivey *et. al*., 2008).

In some areas, school nurses are working together with social workers, mental health workers, and substance abuse counselors as part of a team that provides services to families. Improved training of mandated reporters, such as teachers and physicians, has led to better reporting of abuse. Child abuse prevention education programs can be found in many school districts as a primary preventive intervention (Russell *et. al*., 2007).

D. Oral Hygiene and Dental Care

School-based programs that provide fluoride rinses and dental sealants and promote tooth brushing and nutrition education for dental health can be found across the country. Fluoridation of community water supplies is considered the most effective, safe, and low-cost means of protecting children's dental health. Fluoride makes teeth less susceptible to decay by increasing resistance to the bacteria-produced acid in the mouth. School nurses can safely promote public water fluoridation as an important program for protecting children's dental health and often conduct dental screenings at schools and make referrals to local dentists in an effort to promote better dental health for children and adolescents (Lam, 2008).

2.7. 3. Health Promotion Programs:

A- Nutrition and Exercise Programs

Nutrition and weight control programs form another important set of health promotion service. Children need to learn sound dietary habits early in life to establish healthy lifelong patterns. Being overweight during childhood or adolescence may persist into adulthood and may increase the risk for some chronic diseases later in life. Some school programs teach and provide good nutrition and encourage eating patterns of food that prevent obesity. The school nurse, through nutrition education and reinforcement of positive practices, plays a significant role in promoting health of children, more comprehensive physical education programs that encourage and focus on vigorous individual exercise and self-discipline as lifelong habits would better serve the health needs of this population group. The school nurses can promote such programs in the schools, as well as encouraging these activities in their contacts with students of all ages (Allender *et. al*., 2010).

B- Education to Prevent Substance Abuse:

The well-known hazards of cigarette smoking, inhalant use, and alcohol and drug abuse have prompted the development of substance abuse programs that target school-age children and adolescents. Health education efforts by school nurses**,** teachers, and counselors have influenced students to make responsible decisions about smoking, drinking, and other behaviors affecting their health. The school nurse plays vital role to counseling and referring young people who need help (Manthoor, 2014).

C- Counseling and Crisis Intervention:

Stress control programs for children and adolescents do not exist in any great number, yet they are very much needed. Crisis intervention programs and services that treat a problem after it occurs are helpful and can prevent problems from being worse, but many children and adolescents need an emphasis on primary preventive mental health interventions. For the school nurse, recognition of young people at risk, counseling, and early referral to sources of help can prevent crisis situations. Reduction of stresses in the family and community environments can further enhance health (Evans et.al., 2000).

2.8. School Based Health Centers (SBHCs):

The school-based health centers SBHCs is a model of health care which provides health care at the school site by a multidisciplinary team of health professionals. It could include primary health care services and mental health specialists. Researches have showed the effect of SBHCs on offered health prevention care, such as immunization, and also management of chronic diseases such as obesity, asthma and especially mental health problems. SBHCs also provide sexual health services for adolescents and improve students' academic achievement (About School-Based Health Care, 2011).

2.8.1. Common Characteristics of School Based Health Centers Include the Following:

Locating on school site or on school grounds. Working in coordination and within the school system to become an integral part of the school. Providing a wide range of services that meet the specific physical, mental and behavioral health needs of the students in the community. Using a multidisciplinary team of health providers to provide care for the students, including physicians, nurse practitioners, registered nurses, physician assistants, social workers, alcohol and drug counselors and other health professionals. Providing clinical services through qualified health providers, such as health centers, hospitals or medical practices. Getting the parents' signature on a written consent to receive comprehensive health services provided to their children (Keeton *et. al*., 2012).

School based health centers (SBHCs) bring critical, developmentally appropriate services to children and adolescents where they spend most of their working hours at school. SBHCs have been providing a range of comprehensive services to youth for >40 years (Gustafson, 2005).

Although they vary based on community need and resources. SBHCs possess several common characteristics including location inside or on school grounds, provision of comprehensive services by a multidisciplinary team, and integration with the school community (About School-Based Health Care, 2011).

The United States of America is working to increase the establishment of the SBHCs, where there is more than 1900, (16%) of which were established in the suburbs and (27%) in rural areas and (57%) of which were established in urban areas (Keeton *et. al*., 2012).

SBHCs offer a wide range of primary health care and other services. The National Association of School-based Health Center (NASBHC) 2008,

confirmed that these services cover the following: Comprehensive health appraisals, Health examination. Management of acute diseases. Recipes for medicines. Asthma treatment. Oral health education. Dental examination (Bannister and Kelts, 2011).

Public schools in New York city began to employ nurses in schools as school nurses, in 2007 according to the National Center for Education Statistics (NCES), more than (55,500) school nurse were employed. The role of the school health nurse in the school health-based center is to follow-up the students' health to enable them to continue their achievement and help their parents stay at work, so the school nurses: Assess student's health and making referral as required. Identify hearing and vision problems that affect education. Provide emergency care and first aid services. Administer immunization and medication. Implement health care procedures. Develop disaster- preparedness plans. Provide health advices and wellness programs (Castro et.al.,2008).

2.8.2. Main Component of School Health Centers:

For all that mentioned earlier, the school-based health centers provide varied range from "cot and first-aid station" to "comprehensive clinic offering physical, behavioral, and mental health services to students and their families". The school health centers have to ensure confidentiality, privacy and a feeling of wellbeing. Nurse's Office The prime focus and the main objective of the nurse's office is to prevent illness, chronic diseases and disability, detect and correct the health problems of student and their families as early as possible. The school nurse can achieve these goals through a combination of examination, diagnostic, and treatment services for simple, main and acute problems; providing health education, health promotion and referral to other health community specialties (Bannister and Kelts, 2011).

The main activities of the school nurse include administration of immunizations and hearing and vision examination, organizing student referral to the community agencies, informing parents about their children's health, responding to first aid and simple and major physical injuries, administration of student's medication, and taking the role of instructor and health educator for health resources (National Clearinghouse for Educational Facilities, 2010)

2.9. School Health Services (SHS) in Iraq:

School health services in Iraq began in 1936 as a "dispensary" for students' health, overseen by the Ministry of Education (MOE). It was transferred to the Iraqi Ministry of Health's control in 1952. (MOH). The name was changed to school health center in 1970. The Ministry of Health in Iraq has given special attention and care to health services in general, as well as SHS, maternal and child health services in particular. This is included in Public Health Law Number 89, which was enacted in 1981(Manthoor, 2014).

The Iraqi Ministry of Health's Department of School Health (MOH) provides the following SHS:

2.9.1. Medical Examination of New Pupils Entering School:

The education authorities prepare a health card for each first-year student at the start of each academic year, which is filled with complete information about the students. The areas for the regular check - up are filled in by the school's nurse and doctor, together with the assistance of the pupils' parents and the screening includes (a clinical screening, a visual screening, a hearing screening, an evaluation of nutritional condition, a psychiatric assessment, an assessment of the mouth, gums, teeth, and immunization) (MOH, 2015).

2.9.2. Mobile School Health Team Provides Health Visits to Pupils:

The following are some of the tasks of the mobile school health team:

Pupils' health examinations and recommending who is unwell or disabled to special commissions. Periodic examination of the suitability of the school environment. checkup health of the school canteen. Preserving preventative measures for communicable illnesses (Manthoor, 2014).

2.9.3. Immunizations:

This approach is designed to protect pupils from common communicable illnesses covered by vaccination programs (Hamzah, 2007).

Immunization is a proven strategy to manage and eliminate life-threatening infectious illnesses, and it is an important aspect of school health care. Every year, roughly (2.5) million children die as a result of immunization. Immunization through clinic visits and hospitalization can help prevent some vaccine-preventable infections that cause long-term impairment in children. Immunization is one of the school health programs that is recognized as one of the most cost-effective health expenditures for children, especially in schools, using proven equipment, awareness, mobile, and campaigns that target the most vulnerable and difficult-to-reach persons. Enrollment rates have risen since the Millennium Development Goals (MDGs), making a school-based vaccination program a great way to reach a large number of pupils (WHO, UNICEF and World Bank, 2009).

Low vaccination rates among children, especially poor children, and higher illness rates are vital indicators of the need for continuous monitoring, Reach-out programs, good documentation, and efforts to teach, therefore, community health nurses are involved in all of these preventive measures and

the Department of Health and schools often work together to offer immunization services (Allender *et. al*., 2014)

2.9.4. Health Education:

One of the methods used to improve people's behavior or attitudes toward healthy behaviors is through health education. It is critical to place a strong focus on health education in order to educate schoolchildren with the necessary knowledge to adopt a healthy attitude and conduct. Pupils may be employed as messengers to promote health promotion, disease prevention and well-being through health education and convey health messages back to their parents and families (Khaleel and Yasir, 2014).

Health education is an important component of SHS and is crucial to the core aim of schools. Children of school age have the capacity to gain the skills and information required to develop healthy individuals and effective learners in the future. Health education teaches pupils the skills they need to be effective people. Increasing the number of schools that provide health education for major health issues affecting pupils is a vital health aim for the overall improvement of the health of the nation (CDC and Prevention, 2007).

A training program that is organized and standardized is made available to teachers by the school health team to instruct them on the primary health care principles, with a focus on rural areas. The subjects covered in these programs include: Infectious disease prevention and control. First-aid and emergency treatment. Accident prevention in school, at home, and on the street. Diarrhea and the use of an oral rehydration solution to treat it (ORS). A simple visual evaluation and how to pick up a youngster with vision problems (Manthoor, 2014).

2.9.5. Nutritional Status Assessment:

Weight and height measurement, the Body Mass Index (BMI) program, and the administration of a prophylactic dosage of vitamin A (200000 I.U) to pupils in elementary schools (first class) are always used to assess nutritional status (Abdulla *et. al*., 2018).

Nutrition education in schools educates pupils with the knowledge, skills, and motivation they need to make informed food and lifestyle choices, laying a strong foundation for a healthy and active life. However, if food supplies are limited or unavailable, it is critical that students understand how to effectively utilize their resources to get a diverse range of safe meals with desirable features in order to maintain a healthy nutritional status. Students will acquire the knowledge necessary to recognize and avoid potentially harmful foods, as well as the ability to maintain a healthy diet via the utilization of limited resources, such as locating sources of food that are rich in nutritional content, and how to adapt nutrition education in schools to the local setting and resources available. They are also taught how to cook (FAO, 2005).

Schools play a crucial role in promoting healthy nutrition in pupils. The appearance or sale of inexpensive food in schools' conflicts what children learn about healthy eating in the classroom. To attain a healthy diet, there must be congruence between what children learn in the classroom and the theoretical curriculum, as well as what healthy food options are available in the school environment (Elywy, 2016).

The World Health Organization (WHO) recommended that children in this age group receive an intermittent iron supplement and that use of diet that is high in micronutrients is a treatment method that is very cost such cases Because of a deficiency of micronutrients, children who are of school age often

experience "hidden hunger." In which among them is iron deficiency anemia, which affects twenty percent of the population. (WHO, 2011).

In developing countries, malnutrition is the most serious health issue among schoolchildren. Because school-aged children are more vulnerable to nutritional disorders due to their rapid growth, food safety has become a significant emphasis of health promotion for school-aged children, which is done through early detection of children with nutrition problems. Obesity has become more common among school-aged youngsters all around the world (Abd Al-Hussain, 2015).

In communities where there is a low level of food security or none at all, school feeding programs have typically included the giving of snacks, meals at school, or food aid to be eaten at home in order to attain the highest possible level of academic achievement. By treating hunger, school feeding has a favorable impact on school enrollment (particularly for girls through home-based meals) and enhances pupils' focus, academic achievement, and cognitive ability, allowing them to complete their job better. School meals had a small but significant influence on pupils' health, prompting them to acquire weight. The use of fortified foods in school meals might help to minimize micronutrient deficits (Kristjansson *et. al*., 2009).

2.9.6. Oral Health:

The mouth and its components provide a variety of roles in the body, including participation in the feeding process and communication through expression and speech. Oral illnesses can spread to other bodily cavities and have a adverse effect on a pupli ’s health (Washi et.al., 2018).

Oral hygiene is a required health activity for school students, and it is an important element of public health. In which there is a strong link between increased student knowledge and improved oral health practice, in which

students who have good oral health information are more likely to feel in charge of their oral health and are more likely to practice self-care (Carneiro et.al., 2011).

An unhealthy diet, particularly excessive and frequent sugar intake, poor oral health, and cigarette and alcohol usage, is the most significant risk factor for oral and dental problems in children and adolescents. Sugars can be found in sweets and sugary soft drinks, but they can also be found in a variety of everyday foods. There are also some factors that contribute to mouth diseases, such as low fluoride levels in drinking water, a lack of school-based fluoride programs, and the lack of fluoride toothpaste for oral hygiene. The lack of hygienic facilities and clean water, as well as school instructors' abilities to promote health and avoid mouth infections among pupils, are the main impediments to school-based oral health promotion. Oral health is not included in school curriculum due to a lack of health education opportunities. Furthermore, poor school health services may impair control of oral illnesses in children of school age. The inefficient referral system for children's dental care is a significant concern that might impede oral disease prevention and treatment (Said, 2014).

Oral hygiene techniques include brushing and using toothpaste, cleaning between teeth, using mouthwash, and brushing the tongue. Brushing your teeth on a regular basis is the most effective strategy to avoid oral and gum disease. Brushing teeth at least twice a day is recommended, once in the morning and again before going to bed at night. Furthermore, the procedure of cleaning between teeth is essential, since it serves the same purpose as brushing in preventing dental decay by eliminating food residue between the teeth. Food residue is the driving force behind cavity formation, therefore the teeth are exposed to plaque, in which the food residues attract bacteria and cause tooth decay (Washi et.al., 2018).

Promotion of oral health is seen as an essential part of school health services. Students may be able to avoid oral and dental problems if they participate in programs that involve treatments for good nutrition and food, as well as personal cleanliness. However, there are certain procedures for oral hygiene that need to be followed, the most important of which is the utilization of a suitable fluoride program to protect against tooth decay and alleviate tooth and mouth discomfort. Both in schools and in community-based dentists, dental treatment is centered on adequate preventive (Said, 2014).

Pupils' teeth are examined annually and regularly through a collaboration between school health centers and primary health care facilities (MOH,2015).

The most frequent chronic illnesses in school-aged children across the world are dental disorders (tooth decay) and periodontal disease (gingivitis). Dental caries affects 60 percent to 90 percent of schoolchildren worldwide, and gingival bleeding is the most common indication of gum disease in youngsters. Tooth decay in school-aged children has remained unsolved to date, with major ramifications for children's health. Oral illnesses have a significant effect on pupil’s ability to eat and chew their preferred foods, as well as their overall appearance and communication. The pain in the mouth and teeth might affect a child's concentration and ability to participate in school activities. Make them not only are they unable to play, grow, and develop, but they are also denied access to a comprehensive education. Other typical mouth concerns for children include dental damage and particular oral ulcers in HIV-positive youngsters (Said, 2014).

As primary school pupils may not have regularly planned health care visits during this time, preventative care and counseling services may have to be incorporated into sick visits or carried out via surveys sent to students at their schools. during this time. This involves monitoring growth and development,

screening for any potential anomalies, and reinforcing healthy habits like exercising, sleeping, and eating (Yassen and Fawzi, 2008).

2.9.7. Vision Health:

Vision is the sense that we value the most; we learn more about the world around us through sight than we do with any of the other senses. Many of our everyday activities and pleasures would be impossible to do without sight, and many others would become more challenging. The sense of sight is founded on the eyes, and there are accessory structures around the eyes that serve to keep the eyes secure and functioning properly. Blinking keeps the surface of the eye moist and eliminates debris. Eyelids are a continuation of the skin. Eyelashes are thick hairs that keep foreign matter out of the eyes. They're linked to the tarsal glands, which secrete a lipid-rich fluid that keeps the eyelids from adhering together (Peate, 2016).

To prevent particles and fluid from draining into the lacrimal sac and nasal tube, wipe a sterilized cotton roller soaked with sterile water from the inner eyebrow of the eye to the outer eyebrow to remove and discard the collected and dried secretions on the eyelashes. Many students need to learn specific information about eye care, home remedies to avoid in order to prevent eye problems such as eye irritation or injuries, which are eye problems that must be treated medically and immediately at any age, in the case of dirt or dust in the eyes, thoroughly cleansed with clean and sterile water as a treatment emergency. Measures are also learned to protect against eye strain and vision protection such as keeping suitable lighting for reading (Berman et.al., 2016).

2.9.7.a. Vision Screening Test:

A nurse, teacher, or medical technician should use the Snellen eye chart to conduct vision screening exams once a year. Other authorized (MOH) eye

screening instruments should be utilized for screening checks on the patient's vision (National Vision and Hearing Screening Protocols, 2009).

Students with probable visual impairments are assessed using a vision screening program that might influence their physical, intellectual, social, and emotional development. Early detection and timely intervention are the cornerstones of successful therapy, since they may help students avoid long-term difficulties that can arise during their academic careers. Visual abnormalities, even minor vision impairments, can have educational and medical consequences (School Vision Screening Guidelines, 2014).

The school vision screening program is an important and complementary aspect of the school health program, with the following key goals:

Selecting a vision screening technique and planning observation measures to identify children with suspected visual abnormalities. Informing the parents or other family members that their kid has been identified as having a possible visual impairment and that they should consult an eye care specialist for a more in-depth assessment of their child's condition. Confirming follow-up actions to guarantee that each identified child receives the attention he or she need. Informing educational professionals about pupils with vision impairments and encouraging them to carefully follow the eye specialist's suggestions for the classroom setting. Establishing an educational setting that is suitable for pupils who have difficulties with their vision (School Vision Screening Guidelines, 2014).

2.9.8. Hearing Health:

There are three distinct areas that make up the ear: outer, middle ear, and inner. Each of these three areas is important for hearing, and the internal ear is also important for maintaining balance. The external auditory canal connects the outer ear to the inner ear. The whole canal is covered with a layer of skin

containing hairs, sebaceous (oil) glands, and sweat glands known as the epidermis (ceruminous glands). Cerumen is a yellow–brown waxy cerumen produced by ceruminous glands (ear wax). The oils and wax lubricate the ear canal, kill germs, and keep the ear canal clear of debris when used in combination with the hairs (Peate, 2016).

The presence of foreign matter or earwax in the external ear canal might impair hearing. To clean the ears, one must clean the external ear canal and the auricles. Inserting objects into the ear canal is inappropriate. Adult clients should have excess earwax or foreign material removed by cleaning the external ear and auricle with a warm towel while drawing the ear down. To eliminate dried wax, ear irrigation may be necessary. Prior to ear irrigation, the prescribing practitioner must be contacted (DeLaune and Ladner, 2010).

Hearing loss has an influence on learning as early as the first year of school; nevertheless, many children with modest hearing loss do not have significant learning challenges until the third grade. This difficulty may be the result of increases in linguistic complexity, a decrease in the number of visual signals, an increase in the demand for related auditory information and evocation, and a decrease in the development of necessary skills in earlier grades (Tamanini et.al., 2015).

2.9.8.a. Hearing Screening Tests:

Screening for hearing loss is seen as a simple, fast, and financially sensible practice the method for identifying individuals who are more vulnerable to have abnormalities in the examined function. If the individual fails this exam, they should be directed to more advanced diagnostic treatments. Briefly, the purpose of the hearing screening is to identify persons with hearing problems so that they can be sent for otorhinolaryngological evaluation and a comprehensive audiological evaluation (Tazinazzio et.al., 2011).

Periodic hearing screenings are an essential component of basic preventive care. hearing impairments have detrimental impacts and evident implications on educational and social development. At least one out of every six children have hearing impairment, which can make it difficult for them to learn to read and reading independently (Wang *et. al*., 2011).

Hearing Screening Programs have proven to be the most effective way to detect hearing loss in children at an early stage. Until recently, school-based programs were mostly offered as local efforts in countries such as the USA, Australia, and China, in addition to a few nations located in Europe. (Tamanini et.al., 2015).

Additionally, there is the Newborn hearing screening program, the hearing tests for children at school is recommended by public health policies in order to detect hearing loss early and provide the appropriate therapies as soon as feasible. Otoacoustic emissions (OAE) and tympanometry are two methods that may be used to perform a hearing test. These methods are efficient, do not involve any intrusive procedures, and provide accurate results; as a result, they provide an adequate test profile (Farias et.al., 2012).

Tympanometry is an electroacoustic test that evaluates the integrity of the tympanic ossicular system. It is used as a help in the diagnostic process for middle ear problems. This inexpensive option, quick, and easy process is the preferred approach for those discriminating between middle ear diseases that can affect persons of all ages, particularly school-aged children, when the majority of hearing impairments are caused by middle ear modifications (Carvalho et.al., 2011).

As a result of the fact that there are numerous children do not have access to any form of hearing examination prior to entering school, hearing screening for school age children is an essential tool for the early detection of hearing problems. It allows for increased focus to be paid to the auditory health of children, particularly the identification of hearing loss and early intervention in

this group. It is vital to diagnose hearing loss in school-aged children. The bigger the challenges will be the later hearing loss is identified. Early diagnosis enables the referral of children to professionals who will offer cognitive, social, emotional, and communicative therapy and prevention (Tamanini et.al., 2015).

2.9.9. Surveillance System for communicable disease in schools include:

In the context of public health, surveillance refers to the continuous and methodical gathering, analysis, and analysis of information about health problems that is required for the planning, implementation, and evaluation practice of the public health (WHO. 2017).

For infectious diseases, timely surveillance systems are essential for the early discovery of cases and outbreaks, which enables the implementation of steps to protect others and prevent transmission. In the past, disease-specific clinical diagnoses and laboratory data were utilized for public health surveillance. However, such surveillance methods can be prone to severe delays, and in recent years the significance of syndromic monitoring in delivering more prompt identification of infectious disease has been increasingly recognized (Donaldson et.al., 2021).

School attendance registers provide a significant data source that might be utilized to give more timely information on infectious illness and outbreaks among students. Both gastrointestinal disease and respiratory illness are prevalent among children and are leading causes of school absences due to illness. Children are known as significant infectious disease transmitters, and schools are the primary sites of illness transmission between children. The transmission of illness from schools to the broader community is facilitated by close interaction with parents and grandparents. School absence data might enable the early identification of epidemics inside schools, allowing for prompt action to minimize the spread of illnesses both inside and outside the school

setting. In addition, because school absence may begin on the first day of illness, this innovative dataset has the potential to provide more timely data than healthcare-based surveillance (Béraud et al., 2015).

The implementation of an effective surveillance system for communicable illnesses in order to stop the spread of those diseases among students, which should contain the following components: The early diagnosis of communicable diseases by sufficient education of teachers to refer patients who are vulnerable. Treatment of illnesses as soon as they are identified. Pupils who have had contact with the patient should be examined, and appropriate actions should be made. These steps should include treatment, immunization, and the improvement of environmental conditions that are suitable. Pupils will be required to take a leave of absence, and at the conclusion of that leave, the students will undergo a second examination at a health clinic located within the district's catchment area in order to determine whether or not they will be allowed to return to school. Illnesses such as “poliomyelitis, cholera, TB, meningitis, German measles, measles, chickenpox, mumps, typhoid fever, and diphtheria” are the most common infectious diseases that may be found at educational institutions (MOH, 2015).

2.9.10. Monitoring of School Environment:

As a direct consequence of the events that continual evolution of education and the rise of school enrolment, the needs for the classroom environment are progressively expanding. The administration of the classroom at school should not be confined to mere human maintenance, but should instead be quantitative. With clear parameter values, individuals may determine if the existing environmental of the classroom parameters are qualified and dependable, however require a monitoring system for environmental parameters in the classroom and others technology to adapt the environment to a suitable level (Liu et.al., 2017)

In light of this phenomena, it is vital to create an environmental monitoring system for classrooms, school administrators may gather and monitor classroom environmental characteristics in real time, includes things like temperature, humidity, the amount of smoke present, and the intensity of the light. Which makes it more simple for school administrators to observe the actual state of the classroom environment and achieve parameter management by managing curtain, light, fan, and other equipment to guarantee that the classroom is in a more pleasant setting, in order to make the work of the school management more orderly and to ensure that regular teaching activities continue, but also to meet the requirements of activities in the classroom that are intended to ensure the safety of both the students and the instructors (Liu et.al., 2020).

Each school should get at least one visit from the school health unit each year. The primary health care center in the catchment region supervises the project. The physical and psychological aspects of the educational environment are intertwined. The physical environment promotes schoolchildren's health and safety, whereas the psychological environment incorporates the physical, emotional, and social factors that influence pupils' well-being (AL-Kamil, 2007).

2.9.11. Health Promotion:

Health Promotion is the practice of allowing individuals to take greater responsibility for and improve the health of individual. It moves away from putting the focus on human behavior and instead looks at a number of other social and environmental interventions. Formal or informal health promotion can occur in groups or individually, in a clinical context or on a larger scale includes advocacy and the mobilization of the community (WHO, 2021).

School health promotion has been implemented in most industrialized nations for (50) years. Most countries have attempted to adopt a comprehensive (whole) school health or school-based strategy as opposed to a medical (screening) model, recognizing the importance of healthy lifestyle choices as an essential part of the overall school environment, as opposed to a medical (screening) model. "Healthy schools" is the result of a comprehensive school health approach. The proportion of pupils who benefit and members of the school community who benefit is the key distinction between the model of a healthy school and the promotion of health in schools. A comprehensive school health program provides services in all aspects relating to school health, to students and members of the school community, whereas the medical model typically focuses on one pupil or a small group of students to provide services and/or programs that are generic in nature to support specific health issues (Abdulla et.al., 2018).

2.10. Previous Studies Related to School Health Services:

Taha & Qassim (2021) in Iraq, a study is conducted titled Quality of Health Care System and Structure at Primary Health Care in Baghdad City. It aimed to determine the level of quality of healthcare services in primary healthcare centers. The study included a simple random sample of beneficiaries of healthcare services in primary healthcare centers in the city of Baghdad by (5-8) beneficiaries for each center using a questionnaire to measure the satisfaction of beneficiaries with the quality of services and the use of the direct interview method, which took from (6-10) minutes. The study results showed that customer satisfaction scale is very important to assess the quality of health services and can predict compliance and use of international standards for quality of services. The study also found that most primary healthcare centers are located in densely populated areas. Therefore, primary health care services are adequately provided. Conclusion: The researchers concluded that most

primary health care centers are located in densely populated areas. Therefore, primary health care services are adequately provided.

Jasim & Khalifa (2018) conducted a study in Baghdad / Iraq entitled Evaluation of Quality of Primary Health Care Services at Primary Health Care Centers in Baghdad City: A Comparative Study. To evaluate primary health care services at primary health care centers in Baghdad City and to compare between these primary health care centers relative to such quality. A descriptive design (multistage probability sample) of (36) health care centers was selected. The sample consists of (12) model centers, (12) urban centers, and (12) rural centers. Findings of the study indicate that the primary health care services at most of the primary health care centers have high quality and there is no difference between the primary health care centers based on such quality. The study recommends that managers of primary health care centers can be specialized with high degrees for better quality of primary health care services. Females can be presented with more opportunities to be managers.

Abdulla *et. al,* 2018. in Iraq, a study is conducted titled Evaluation of School Health Services for Primary School Students Provided by Primary Health Care Centers in Holy Karbala. A descriptive- cross section study design was carried out through the period from 1st September 2016 to 15th August 2017 to evaluate school health services for primary schools 'students provided by primary health care centers at Al-Hindiya district in Holy Karbala. Non-Probability 'Purposive 'sample of (160) subjects included in the present study. The sample of the study is divided into three categories which include: (6) directors of primary health care centers, (6) school health services providers and (148) consumers (school principals). Data were collected through the use of an evaluation tool and an interview technique. It is comprised of (3) parts. The overall items included in this questionnaire are (76) items. A pilot study conducted to determine the reliability of the questionnaire, while the validity is

obtained by distribution of the questionnaire through a panel of (14) experts. Statistical Package for Social Sciences (SPSS) version (24) used for the analysis of the data through using the descriptive statistical data analysis approach (mean of scores, percentage, frequencies, and graphical presentation of data; and inferential statistics approach which include analysis of variance (ANOVA) procedure and deductive statistics include, Fisher's exact, Pearson's correlation and Chi square test. The finding of the study showed that most of the primary health care centers (66.6%) have no an integrated school health team, none of them have computerized system to document their records, an ambulance in the primary health care centers is not available, some school health coordinators lack performance in terms of follow-up of school health activities. There is no equipped place or room to provide emergency care and first aid services at school. Some school principals were dissatisfied with the follow up of workers health and finally the evaluation of overall satisfaction of the school's principals for all domains of the school health services was satisfied to some extent, with a mean score of (2.21)

Raddam (2017) in Iraq, a study is conducted titled Quality Assurance of Essential Primary Health Care Services at Primary Health Care Centers in AL-Najaf AL-Ashraf Governorate. To determine the quality assurance for essential primary health care services in AL-Najaf AL-Ashraf Governorate, identify the relationships between the quality assurance for essential primary health care services and characteristics of the organizational system, client satisfaction, and provided service. Descriptive simple random sample study of (504) subjects is selected through the use of probability sampling approach. The sample is divided into three groups which include (18) directors of primary health care centers, (18) primary health care services providers, and (468) consumers. A simple random sample of (504) subjects is selected through the use of probability sampling approach. The sample is divided into three groups which

include (18) directors of primary health care centers, (18) primary health care services providers, and (468) consumers. The findings of the study indicate that the mean catchments population for PHC centers is high; shortages of the medical, medical assistants, and administration workforce. The nursing, medical assistants, and administration staff are poorly distributed, maternal and child health services including family planning and health education services are in critical level, consumers showed inadequate overall satisfaction with primary health care services. The study recommends that to increase the total number of PHC centers according to the numbers of consumers within area; collaboration and coordination should be initiated between Ministry of Health, Ministry of Higher Education and Educational agencies to establish planning system to provide PHC facilities with workforce needed according to the numbers of consumers within the area, taken into accounts national standards; provision of scientific booklet on standards operating procedures (SOPs) and guided by clear job description in all fields of primary health care service provision.

Kuponiyi *et. al*. (2016) conducted a study entitled " School health services and its practice among public and private primary schools in Western Nigeria " aimed at determining the school health services available and its practices in primary schools in Ogun state Nigeria. The most important results of the study are a total of (360) head teachers served as respondents for the study with the overall mean age of 45.7 ± 9.9 years. More than three quarters of the respondents in both groups could not correctly define the school health program. There were no health personnel or a trained first aider in (86) i.e. (47.8%) public and (110) i.e. (61.1%) private schools but a nurse/midwife was present in (57) i.e. (31.7%) and (27) i.e. (15.0%) public and private schools. ($\chi(2) = 17.122$, $P = 0.002$). In about (95%) of the schools, the teacher carried out routine inspection of the students while periodic medical examination for staff and students was carried out in only (13) i.e. (7.2%) public and (31) i.e. (17.2%) private schools.

A sick bay/clinic was present in (26) i.e. (14.4%) and (67) i.e. (37.2%) public and private schools respectively. The practice of school health program was dependent on the age and the ethnicity of the respondents. The study concluded that the practice of the various components of school health services was poor but it was better in private primary schools in Nigeria. Routine inspection by teachers was the commonest form of health appraisal. This may suggest that more health personnel need to be employed to cater for the health of the school children in Nigeria and other similar developing countries.

Abd Al-Hussain (2015) conducted a study in Babylon / Iraq entitled "Evaluation of Some Aspects of School Health Services in Babylon Province, 2015". The study aimed to evaluate the performance of some primary health care centers in terms of the implementation of some aspects of school health services screening for (refractive errors , speech disorders and malnutrition) and to find the gaps in identification of these disorders among first grade primary school children .The most important results of the study showed that there were significant differences between the proportion of cases detected by this study as compared to the data reported by the school health records in the primary health care centers (the numbers of assessed students significantly higher than that found in health teams records). The prevalence of the following health problems detected by researcher during the screening process were (3.6%) , (7.3%) , (12.4%) for refractive errors , speech disorders and obesity respectively while the findings of school health services records were (0,4%) , (0,6%) , (2.6%) respectively. The study concluded that school health services provided to primary schools students were neither complete nor accurate and the study recommended that urgent attention should be paid to the running of the school health services in primary schools in Babylon province, and the school health teams of the PHCCs should be reactivated and empowered to perform their function through building refreshment training course.

Kumar and Mishra (2015), in India, conducted as study titled "Quality of health care in primary health care system: A reflection from Indian state", aimed at to assess the quality of primary health care and to identify important barriers that hamper quality service achievement, main results of the study demonstrated that the quality of primary health care services is abysmally poor in primary health care setting of UP. The state has some of the deplorable health outcomes among the Indian states as consequences of poor quality in health care services.

Manthoor, (2014) conducted a study in Iraq titled as Evaluation of Quality Assurance for School Health Services at Primary Health Care Centers in Babylon Governorate aiming to Evaluate the quality assurance for school health services in terms of it is essential components as structure, process and outcome in primary health care centers at Babylon Governorate and to find out the relationship between the quality assurance for school health services and characteristics of the system, providers and consumers. The study concluded that the overall evaluation of the quality assurance for school health services is inadequate and Inadequate coordination between health centers and school's administration.

Khalifa & Sa'adoun (2010) conducted a study in Iraq titled Determination of Quality Assurance for Maternal and Child Health Services in Baghdad City. To Determine the quality assurance for maternal and child health care services at primary health care center in Baghdad city and Identify the relationships between the quality assurance for maternal and child health services and characteristics of the system, providers and consumers. A descriptive study (simple random sample) of (349) is selected through the use of probability sampling approach. The sample of study is divided into four groups which include (220) consumers, (35) medical staff, (72) nursing staff and (22) organization structure (primary health care centers). Data analysis is performed

through the use of descriptive statistical data analysis approach graphical presentation by bar-chart, frequencies, percentages and mean of scores and inferential statistical data analysis approach which is presented as chi-square procedure. The findings and conclusion of the study indicate that there is overload of target population on primary health care centers, poor designed building, program statistical and data reporting system was poor decrease core financial support and inadequacy of funding for primary health care centers.

Chapter Three
Methodology

Chapter Three

Methodology

3.1. Design of the Study:

Non- experimental research a descriptive study approach was used to evaluate the quality assurance for school health services in (133) elementary schools and (six) main primary health care centers at Al- Numaniya District from 5th July 2022 to 25th April 2023.

3.2. Administrative and Ethical Arrangements:

A Series of arrangement has been done to obtain official permission and facilities from the following:

a. The study approval was obtained from the Faculty of Nursing / Babylon University (Appendix A2, A4).

b. The Ethical Research Committee gave its ethical seal of approval at the Faculty of Nursing / Babylon University (Appendix A1)

c. Permission has been gained from the Wasit Health Department / Training and Development Center/Unit of Continuing Medical Education in Wasit Governorate when the research protocol has been approved (Appendix A3).

d. Permission has been gained from the Ministry of Education / Directorates of Educational at Al-Numaniya district in Wasit Governorate when the research protocol has been approved (Appendix A5).

e. Finally, a voluntary verbal agreement was gained from the participants after explaining the purpose of the study in order to contribute in the study.

3.3. Setting of the Study:

A study setting is composed of (133) elementary schools out of (148) and they were served by six main PHCCs and they are constituted (86%) of the total number of the study 's main health care centers at Al- Numaniya District.

3.4. Sample of the Study:

The study's sample is divided into four different groups, which include:

A1. (6) directors of primary health care centers.

A2. (133) elementary schools

A3. (32) Health care providers who are working in school health services unit at PHCCs.

A4. which includes (133) consumers (school principals) satisfaction toward the provided school health services.

Note: The School principals were involved instead of pupils due to the lack of pupils' awareness regarding school health services.

All of groups of the sample selected by Convenient sample of (304) subjects has been selected throughout the use of nonprobability sampling approach.

3.5. Modification of Study Instrument:

A thorough assessment of the literature and comparable research, the questionnaire was created and prepared to be used for the study's aim. It comprises of four questionnaires forms distrusted on (Structure, Process and outcome) to evaluate the quality assurance regarding school's health services which included the following:

3.5.a. Structure Standards of Organization:

First: Questionnaire of Structure Standards of health centers.

The questionnaire consists of the following (Appendix B1):

Buildings, Availability of Supplies, Materials and Resources

This part includes information about building, rooms, material, medication, medical supplies and laboratory supplies it is comprised of (15) item.

Second: Questionnaire of Structure Standards of Elementary schools.

This questionnaire created depending on the standard designed by Ministry of Health (MOH) for study structure and environmental detection of school buildings of the elementary school that includes (55) items and divided into (8) sections which includes:

a. The structural building of the school: Which composed of 13 items.

b. Classrooms and halls: Which composed of 12 items.

c. Water and sanitation: Which composed of seven items.

d. Dealing with waste: Which composed of five items.

e. Insect and rodent control: Which composed of two items.

f. Service workers: Which composed of four items.

g. Medical supplies and safety requirements: Which involved of six items.

I. Canteen: Which involved of six items.

3.5.b. Process Standards (Providers):

Thirdly: Questionnaire of Health care providers

The questionnaire includes the following parts (Appendix B1):

Part1: Demographic Characteristics

This part includes information concerning the socio-demographic characteristics of the nursing staff of age, Sex, educational level and years of experience at school health care services (4) items.

Part 2: Training and Development

This part includes (1) item concerning staff's training and development.

Part 3: Activity and Duties for health care providers

This part is comprised of (11) items concerning activities and duties of the nursing staff. Evaluation of activities and duties are calculated by using tripartite Likert's Scale which included (1) score to refuse of item(never), (2) score to neutral scale of item(sometime) and (3) score to accept of item (always).

3.5.c. Outcome Standards (Consumers):

Fourth: Questionnaire of school principals' satisfaction of School Health Services

The questionnaire consists of the following parts (Appendix B1):

Part 1: Demographic Characteristics

This part comprises information concerning the socio-demographic characteristics of school principals of age, Sex and education achievement (3) items.

Part 2: Health Education

This part comprises (1) items which are related to participated in an educational lecture on school health.

Part 3: Satisfaction and acceptance of school principals for school health services

This part consists of (10) items concerning principals' satisfactions and acceptance for school health care services.

3.6. Rating and Scoring:

Bilateral Likert's Scale is used to evaluation of organization structure for each health centers and Elementary schools which calculated by (1) score for item (no) and (2) score for item (yes).

Tripartite likert's scale is used to evaluation activity and duties for health care providers and satisfaction and acceptance of school principals which included (1) score to refuse of item(never), (2) score to neutral scale of item(sometime) and (3) score to accept of item (always).

Overall evaluation of primary health care centres structures according to the total mean of the score which follows:

- ***M=15 - 20*** refers to poor evaluation
- ***M=20.1- 25*** refers to Moderate evaluation
- ***M=25.1- 30*** refers to Good evaluation

Overall evaluation of structure standards of elementary schools according to the total mean of the score which follows:

- **M=55 -73.33** refers to Poor
- **M=73.34 - 91.66** refers to Fair
- **M=91.67 - 110** refers to Good

Overall evaluation of nursing staff activity and duties (process) according to the total mean of the score which as follows:

- **M=11- 18.33** refers to Inadequate
- **M=18.34- 25.66** refers to Fair
- **M=25.67- 33** refers to Adequate

Overall evaluation of satisfaction and acceptance of school principals for school health services (outcome).

- **M=10- 16.66** refers to Unsatisfied

- **M=16.67- 23.33** refers to Somehow
- **M=23.34- 30** refers to Satisfied

Cutoff point calculated by dividing the number (2) that represent numbers of interval between three categories in the questionnaire (Never, sometime and Always) on the numbers of categories (3) = 0.66:

- **Poor evaluation:** when mean score was (1 - 1.66).
- **Fair evaluation:** when the mean score was (1.67 - 2.33).
- **Good evaluation:** when the mean score was (2.33 - 3).

Cutoff point calculated by dividing the number (1) that represent numbers of interval between three categories in the questionnaire (Yes and No) on the numbers of categories (3) = 0.33:

- **Poor evaluation:** when mean score was (1 - 1.33).
- **Fair evaluation:** when the mean score was (1.34 - 1.66).
- **Good evaluation:** when the mean score was (1.67 - 2).

3.6. Content Validity:

Validity refers to ability of the instruments to gather the data intended to be gathered. The questionnaire was sent to (16) experts (Appendix- C1) in various field and universities to evaluate the contents of the questionnaire. They were from the University of Babylon / Faculty of Nursing (2) expert, from the University of Kufa / Faculty of Nursing (3) expert, from the University of Karbala / Faculty of Nursing (1) expert, from the University of Al. Ameed / Faculty of Nursing (1) expert, from the University of Al-Basra / Faculty of Nursing (1) Expert, from the University of Dhi Qar/ Faculty of Nursing (1) expert, from the University of Al-Bayan / Faculty of Nursing (1) expert, from University of Baghdad / Al-Kindi College of Medicine (1) expert, from the University of Babylon / Faculty of medicine (1) expert, from Al-Mustaqbal University College / Nursing department (1) expert, from Al-Toosi University

College / Nursing department (1) expert, from the Medical Technical Institute / Baquba (1) expert, from Northern Technical University/Mosul Technical Institute (1) expert.

The experts were asked to revise the form and review the content to make sure its clarity and adequacy where they were provided with copies of the study instrument. Most agreed that the questionnaire was clear, adequate and relevant. Based on expert recommendations and suggestions, some modifications were made to the questionnaire.

3.7. Pilot study:

A pilot study was carried out in the Al- Numaniya district from 10th July to 30th July, 2022, at one main primary care center, which represents for (14%) of all health care centers, and at fifteen elementary schools, which represents for (10%) of all elementary schools. The pilot study found that the time necessary for each interview (questionnaire) was between (15-20) minutes, and the questionnaire duration was clearly appropriate and practical.

Note: It should be noted that the fifteen elementary schools that participated in the pilot study, as well as the one primary healthcare center, were not included in the main study.

(the pilot study 15 school and one primary health care center excluded from the main study) which represent (89 %) of the total number of elementary schools in Al- Numaniya District.

3.7.1. The Purposes of the Pilot Study:

- To demonstrate participant reliability.
- To check the simplicity and adequacy of the content in the constructed questionnaire.

- To determine the time required after completing each questionnaire form during the interview process.
- To detect the best solutions is required when you discover the nature problems that may face when conducting the questionnaire (Vogel & Draper .2017).

3.7.2. The Results of the Pilot Study:

Following were found from the pilot study's findings:

- The time needed for filling the questionnaire was clearly estimated.
- The items of the study instrument were clear and understood.

3.8. Reliability of Questionnaire:

The purpose of using the reliability of the questionnaire is to determine internal consistency and stability in the variables of study. In this study, the researcher used SPSS program version (24) according to Cronbach's Alpha to determine stability and internal consistency. Where the test showed a high level of stability and internal consistency in the main study domain (Structure Standard, Process Standard, Outcome Standard). The acceptable reliability coefficient is more than (0.70) where the normal range is (0 - 1), as shown in Table (3.1).

Questionnaire		Cronbach's Alpha	Assessment
Structure Standard	Health centers Questionnaire	0.89	Accepted
	Primary schools Questionnaire	0.82	Accepted
Process Standard	Nursing staff Questionnaire	0.93	Accepted
Outcome Standard	Consumer's Questionnaire	0.76	Accepted

Table (3.1): Reliability of the Questionnaire that studied

This table shows the statistical result when using SPSS program version (24) by using the alpha-Cronbach method to find out the reliability of the study. The result showed a high level of stability and internal consistency of the main study questionnaire.

3.9. Data Collection:

Data was gathered by distributing the questionnaire's Arabic version (Appendix- B2) after it had been created and refined using validity and reliability and through interview technique and researcher observation. Interviews are conducted with directors of main primary health care centers, nursing and health staff and school principals, each interview takes approximately (15-20) minutes. The data collection process was started from 7th August 2022 to 25th October 2022.

Primary Health Care Sector	Primary Health Care Centers
Al-Numaniyah Sector 1	Al-Numaniya
	Shuhada' Alhashd
	Al-Sadrayn
	Al- Ahrar
	Al- Hijam
	Syed Qassem Shubar

Table (3.2) Distribution of the Primary Health Care Centers in Al-Numaniya district.

3.10. Methods of Statistics Data Analysis

The following statistical analysis is carried out by using Microsoft Excel 2010 and SPSS software version 24:

3.11.1. Descriptive Statistical Data Analysis Approach

A variety of mathematical and statistical techniques are used in descriptive statistics to quantitatively represent the key characteristics of data using tables and charts. The goal of descriptive statistics is to provide and explain the data that must be processed, sorted, summarized, and categorised. They also aim to convey the data clearly so that the receiver may quickly recognize and understanding its meaning. The analysis was done through the use:

A. Statistical tables "Frequencies and percent" which are:

$$\% = \frac{\boldsymbol{Frequency}}{\boldsymbol{Sample\ Size}}\ x100$$

B. Statistical Mean "*M*±".

The following formulas can be used to determine the average score:

$$M.S = \frac{\sum \text{ri} = 1\text{Fi x Si}}{\sum \text{ri} = \ 1\text{Fi}}\ x100$$

C. It uses a correlational coefficient "Cronbach alpha" utilized in calculating the study tool's internal consistency, which may be done by utilizing the following formulas:

$$\alpha = \frac{K}{K-1}\left[1 - \frac{\sum_{i=1}^{K} \sigma_{ii}}{\sum_{i=1}^{K}\sum_{j=1}^{K} \sigma_{ij}}\right]$$

3.12.2. Inferential approach

A. Chi square (χ^2) test

- Used to identify relationship between nurses' staff activities from one side and their socio-demographic characteristics from the other side.
- Used to identify relationship between school administrative satisfaction and their socio-demographic characteristics

$$\chi_c^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

Where: O = observed value

E= expected value

B. Kolmogorov-Smirnova (K.S):

The purpose of this statistical test is to determine if a sample derives from a population with a normal distribution. Which shows that a normal distribution of tested variables (structure, process and outcome).

C. Pearson correlation coefficient:

To identify the correlation between outcome of quality assurance for school health services with regard structure of primary health care centres.

Level of significance as following:

- P. value ≤ 0.05 considered as significant.
- P. value > 0.05 Not significant.

3.13. Limitations of the Study:

The present study is limited to the fact that its findings can be generalized to the sample only.

Chapter Four
Results of the Study

Chapter Four
Results of the Study

Under the purposes of current study findings, the descriptive and inferential statistic approach organized in tables and figures includes the following:

4-1: Distribution of Studied Sample by their Socio-Demographic

Table (4-1. A): Studied Sample Distribution by their Socio-Demographic Variables (health care providers) (n=32)

Socio-Demographic Variables		f	%
Sex	Male	17	53.1
	Female	15	46.9
	Total	32	100
Age/years	20- 29 years old	9	28.1
	30- 39 years old	12	37.5
	40- 49 years old	9	28.1
	50 and older	2	6.3
	Total	32	100
Educational level	Nursing school	3	9.4
	Preparatory of nursing	16	50.0
	Diploma	11	34.4
	Bachelor	2	6.3
	Total	32	100
Years of experience	<5 years	16	50.0
	5- 10 years	13	40.6
	>10 years	3	9.4
	Total	32	100
Training courses of health care providers	Yes	11	34.4
	No	21	65.6
	Total	32	100

This table as frequencies and percentages. Out of (32) subjects participating in this study were male (53.1%) their age ranged from 30-39 years old (37.5%), Preparatory in nursing graduated (50%) and (50%) of them had less than 5 year as an experience without training (65.6%).

Table (4-1. B): Studied Sample Distribution by their Socio-Demographic Variables (School Principals) (n=133)

Socio-Demographic Variables		f	%
Sex	Male	85	63.9
	Female	48	36.1
	Total	133	100
Age/years	<30 years old	3	2.3
	30- 39 years old	30	22.6
	40- 49 years old	35	26.3
	50 and older	65	48.9
	Total	133	100
Qualifications	Preparatory academy	2	1.5
	Teacher institute	66	49.6
	Bachelor	58	43.6
	Higher Diploma	7	5.3
	Total	133	100
Training Courses regarding SHS	Yes	80	60.2
	No	53	39.8
	Total	133	100

This table as frequencies and percentages. Out of (133) subjects participating in this study were male (63.9%) their age above 50 years old (48.9%) Teacher institute (49.6%) and had training (60.2%).

4.2. Evaluation of Quality Assurance Regarding Structure of Primary Health Care Centres and Elementary School.

Table (4-2. A): Primary health care centres structure availability of supplies and resources (n=6)

List	Items	Responses	No.	%	*M.s*	*Evaluation.*
1	Is the health center far from the nearest hospital	No	3	50.0	*1.50*	***Fair***
		Yes	3	50.0		
2	Are the health center services in the field of school health sufficient to cover the population density	No	3	50.0	*1.50*	***Fair***
		Yes	3	50.0		
3	The building is originally designed as a health center	No	3	50.0	*1.50*	***Fair***
		Yes	3	50.0		
4	Number of rooms in the health center is sufficient	No	2	33.3	*1.67*	***Good***
		Yes	4	66.7		
5	There is a special room for the school health unit	No	2	33.3	*1.67*	***Good***
		Yes	4	66.7		
6	Availability of lecture room	No	2	33.3	*1.67*	***Good***
		Yes	4	66.7		
7	Availability of computer	No	5	83.3	*1.17*	***Poor***
		Yes	1	16.7		
8	Availability of optometry supplies	No	3	50.0	*1.50*	***Fair***
		Yes	3	50.0		
9	Availability of Ambulance	No	3	50.0	*1.50*	***Fair***
		Yes	3	50.0		
10	Availability of weight measure	No	3	50.0	*1.50*	***Fair***
		Yes	3	50.0		
11	Availability of length measure	No	1	16.7	*1.83*	***Good***
		Yes	5	83.3		
12	Availability of medications	No	1	16.7	*1.83*	***Good***
		Yes	5	83.3		
13	Availability of vaccines	No	4	66.7	*1.33*	***Poor***
		Yes	2	33.3		
14	Availability of medical supplies and laboratory materials	No	4	66.7	*1.33*	***Poor***
		Yes	2	33.3		
15	Waste management supplies	No	4	66.7	*1.33*	***Poor***
		Yes	2	33.3		

Level of Assessment (Poor = 1-1.33; Fair = 1.34-1.66; Good =1.67-2)

This table showed that fair primary health care centres structure as indicated by moderate mean of scores (*M.s.1.34-1.66*) at all studied items of the scale except, poor primary health care centres structure in terms of (*availability*

of computer, availability of vaccines, availability of medical supplies and laboratory materials and waste management supplies) as indicated by low mean of scores (*M.s=1-1.33*), as well as, the good primary health care centres structure in terms of (*number of rooms in the health centre is sufficient, there is a special room for the school health unit, availability of lecture room, availability of length measure and availability of medications*) as indicated by high mean of scores (*M.s=1.67-2*).

Table (4-2. B): Overall evaluation of primary health care centres structure availability of supplies and resources(n=6)

PHCCs Structure	Freq.	%	*Total Mean*	*Eval*
Poor (*M=15-20*)	1	16.7	*1.49*	***Fair***
Fair (*M=20.1-25*)	4	66.7		
Good (*M=25.1-30*)	1	16.7		
Total	6	100.0		

This **Table** showed that (66.7%) of the primary health care centres structure were fair availability of supplies and resources as described by moderate average, which is equivalent to *1.49.*

4.3. Evaluation of structure standards of Elementary schools

Table (4-3. A). Evaluation of structural building of the elementary school (n=133)

List	Items	Responses	No.	%	*M.s*	*Evaluation.*
1	The school is far from workshops, gas fields and fuel filling stations	No	20	15.0	*1.84*	***Good***
		Yes	113	85.0		
2	The school is far from generators, electrical wires and mobile towers	No	49	36.8	*1.63*	***Fair***
		Yes	84	63.2		
3	The school is far from the water pools	No	24	18.0	*1.81*	***Good***
		Yes	109	82.0		
4	The school is far from any source of noise	No	62	46.6	*1.53*	***Fair***
		Yes	71	53.4		
5	School area is proportional to the number of pupils (ideal 10-15 m2) per pupil	No	75	56.4	*1.43*	***Fair***
		Yes	58	43.6		
6	The school wall is present	No	22	16.5	*1.83*	***Good***
		Yes	111	83.5		
7	The height of the school wall is 2 , 1.8 m	No	24	18.0	*1.82*	***Good***
		Yes	109	82.0		
8	The school yard is present	No	10	7.5	*1.92*	***Good***
		Yes	123	92.5		
9	The school yard is regular	No	49	36.8	*1.63*	***Fair***
		Yes	84	63.2		
10	Rainwater is drained from the squares regularly (connected to a sewage system)	No	91	68.4	*1.31*	***Poor***
		Yes	42	31.6		
11	The school garden is present	No	40	30.1	*1.69*	***Good***
		Yes	93	69.9		
12	The school garden is clean	No	48	36.1	*1.64*	***Fair***
		Yes	85	63.9		
13	No cracks or demolitions in the school building (classes + School Roof)	No	91	68.4	*1.31*	***Poor***
		Yes	42	31.6		
Overall evaluation		**Poor**	**12**	**9.0**	***1.65***	***Fair***
		Fair	**53**	**39.8**		
		Good	**68**	**51.1**		

Level of Assessment (Poor = 1-1.33; Fair = 1.34-1.66; Good = 1.67-2)

This table showed the fair schools structural building as indicated by moderate mean of scores (*M.s.1.34-1.66*). Schools structural building were good at items number (1, 3, 6, 7, 8 and 11) as indicated by high mean of score (*M.s ≥1.67*) and schools structural building were poor at items number (10 and 13) as indicated by low mean of scores (*M.s ≤1.33*).

Table (4-3. B). Evaluation of classrooms and halls (n=133)

List	Items	Responses	No.	%	*M.s*	*Evaluation.*
1	**Dimensions of classes is ideal (6m width, 8m length, 4m height)**	No	68	51.1	*1.49*	***Fair***
		Yes	65	48.9		
2	**Classes space is enough for students: (ideal 1 - 1.5 m per student)**	No	76	57.1	*1.43*	***Fair***
		Yes	57	42.9		
3	**Natural ventilation of the classroom is sufficient (windows area 6/1 - 1/4 classroom space)**	No	52	39.1	*1.61*	***Fair***
		Yes	81	60.9		
4	**Artificial ventilation of the classes is present and sufficient**	No	65	48.9	*1.51*	***Fair***
		Yes	68	51.1		
5	**The natural lighting of the classes is enough**	No	71	53.4	*1.46*	***Fair***
		Yes	62	46.6		
6	**Artificial lighting of classes is present and enough**	No	73	54.9	*1.45*	***Fair***
		Yes	60	45.1		
7	**Hand sanitizers are available in classroom**	No	90	67.7	*1.32*	***Poor***
		Yes	43	32.3		
8	**The seats and desk are proportional to the number of students (one desk per student)**	No	99	74.4	*1.25*	***Poor***
		Yes	34	25.6		
9	**The distance between one desk and another at least more than a meter**	No	103	77.4	*1.22*	***Poor***
		Yes	30	22.6		
10	**The school seats and desk are suitable for student**	No	69	51.9	*1.48*	***Fair***
		Yes	64	48.1		
11	**Distance between blackboard and front row of the students regular (1.5 - 2 m) at least**	No	30	22.6	*1.77*	***Good***
		Yes	103	77.4		
12	**Window glass unbroken**	No	76	57.1	*1.42*	***Fair***
		Yes	57	42.9		
Overall evaluation		**Poor**	**42**	**31.6**	***1.45***	***Fair***
		Fair	**74**	**55.6**		
		Good	**17**	**12.8**		

Level of Assessment (Poor = 1-1.33; Fair = 1.34-1.66; Good = 1.67-2)

This table showed that the fair schools' classroom and halls as indicated by moderate mean of scores (*M.s.1.34-1.66*). Schools classroom and halls were poor at items number (7, 8, and 9) as indicated by low mean of score (*M.s ≤1.33*) and schools' classroom and halls were good at items number (11) as indicated by low mean of scores (*M.s ≥1.67*).

Table (4-3. C). Evaluation of water and sanitation (n=133)

List	Items	Responses	No.	%	*M.s*	*Evaluation.*
1	**Water supply is available**	No	14	10.5	*1.89*	***Good***
		Yes	119	89.5		
2	**Water tanks are present**	No	11	8.3	*1.91*	***Good***
		Yes	122	91.7		
3	**Water tanks are present and unstableness**	No	29	21.8	*1.78*	***Good***
		Yes	104	78.2		
4	**Adequate water tanks relative to the ideal number of students: (10 liters per student)**	No	36	27.1	*1.72*	***Good***
		Yes	97	72.9		
5	**Number of drinking water taps is sufficient for the proportion of students: (a faucet for every 50 pupils)**	No	57	42.9	*1.57*	***Fair***
		Yes	76	57.1		
6	**Number of toilets sufficient relative to the number of students: ideal (one toilet per 25 students)**	No	73	54.9	*1.45*	***Fair***
		Yes	60	45.1		
7	**Soap and hand sanitizers are available**	No	74	55.6	*1.44*	***Fair***
		Yes	59	44.4		
Overall evaluation		**Poor**	**7**	**5.3**	***1.68***	***Good***
		Fair	**40**	**30.1**		
		Good	**86**	**64.7**		

This table showed that the good schools' water and sanitation as indicated by high mean of scores (*M.s ≥1.67*). Schools water and sanitation were fair at items number (5, 6 and 7) as mean of score (*M.s 1.34-1.66*).

Table (4-3. D). Evaluation of dealing with waste (n=133)

List	Items	Responses	No.	%	*M.s*	*Evaluation.*
1	**Present regular waste containers (regular container with cover)**	No	48	36.1	*1.64*	***Fair***
		Yes	85	63.9		
2	**Containers are regular and adequate in number**	No	67	50.4	*1.49*	***Fair***
		Yes	66	49.6		
3	**Collects waste in right method**	No	44	33.1	*1.67*	***Good***
		Yes	89	66.9		
4	**Waste is collected regularly daily**	No	26	19.5	*1.80*	***Good***
		Yes	107	80.5		
5	**Trash cans opened through the foot are available**	No	96	72.2	*1.27*	***Poor***
		Yes	37	27.8		
Overall evaluation		**Poor**	**16**	**12.0**	***1.57***	***Fair***
		Fair	**74**	**55.6**		
		Good	**43**	**32.3**		

This table showed that the fair schools dealing with waste as indicated by moderate mean of scores (*M. s=1.34-1.66*). Schools dealing with waste were good at items number (3 and 4) as indicated by high mean of score (*M.s*≥1.67) and poor at items number (5) as indicated by high mean of score (*M.s≤1.33*).

Table (4-3. E). Evaluation of insect and rodent control (n=133)

List	Items	Responses	No.	%	*M.s*	*Evaluation.*
1	**The school is sprayed with pesticides by health teams**	No	97	72.9	*1.27*	***Poor***
		Yes	36	27.1		
2	**Rodents are combated by health teams**	No	93	69.9	*1.30*	***Poor***
		Yes	40	30.1		
Overall evaluation		**Poor**	**79**	**59.4**	***1.28***	***Poor***
		Fair	**32**	**24.1**		
		Good	**22**	**16.5**		

Level of Assessment (Poor =1-1.33; Fai r=1.34-1.66; Good =1.67-2)

This table showed that the poor schools insect and rodent control as indicated by low mean of scores (*M.s≤1.33*).

Table (4-3. F). Evaluation of clean workers (n=133).

List	Items	Responses	No.	%	*M.s*	*Evaluation.*
1	**There are enough clean workers (one worker per 100 students)**	No	84	63.2	*1.36*	***Fair***
		Yes	49	36.8		
2	**There's a medical check-up card for clean workers**	No	83	62.4	*1.37*	***Fair***
		Yes	50	37.6		
3	**clean workers wear face mask inside the school**	No	84	63.2	*1.36*	***Fair***
		Yes	49	36.8		
4	**There's a health education card for clean workers**	No	109	82.0	*1.18*	***Poor***
		Yes	24	18.0		
Overall evaluation		**Poor**	**85**	**63.9**	***1.32***	***Poor***
		Moderate	**29**	**21.8**		
		Good	**19**	**14.3**		

Level of Assessment (Poor =1-1.33; Fai r=1.34-1.66; Good =1.67-2)

This table showed that the poor schools services workers as indicated by low mean of scores (*M.s≤1.33*). Schools services workers were fare at items number (1, 2 and 3) as indicated by moderate mean of score (*M.s=1.34-1.66*).

Table (4-3. G). Evaluation of medical supplies and safety requirements. (n=133).

List	Items	Responses	No.	%	*M.s*	*Evaluation.*
1	**First aid box is present**	No	91	68.4	*1.31*	***Poor***
		Yes	42	31.6		
2	**First aid box supplies available**	No	93	69.9	*1.30*	***Poor***
		Yes	40	30.1		
3	**Having a sight check plate**	No	92	69.2	*1.31*	***Poor***
		Yes	41	30.8		
4	**Fire extinguishers are present**	No	99	74.4	*1.25*	***Poor***
		Yes	34	25.6		
5	**Fire extinguishers are present and valid**	No	102	76.7	*1.23*	***Poor***
		Yes	31	23.3		
6	**Wires and power points are regular**	No	97	72.9	*1.27*	***Poor***
		Yes	36	27.1		
Overall evaluation		**Poor**	**103**	**77.4**	***1.28***	***Poor***
		Fair	**29**	**21.8**		
		Good	**1**	**.8**		

Level of Assessment (Poor =1-1.33; Fair=1.34-1.66; Good =1.67-2)

This table showed that the poor schools medical supplies and facilities requirement as indicated by low mean of scores (*M.s≤1.33*).

Table (4-3. H). Evaluation of canteen (n=133).

List	Items	Responses	No.	%	*M.s*	*Evaluation.*
1	**The canteen is available**	No	85	63.9	*1.36*	***Fair***
		Yes	48	36.1		
2	**The canteen is available and meets the health conditions (building)**	No	87	65.4	*1.34*	***Fair***
		Yes	46	34.6		
3	**The canteen is committed to healthy food**	No	97	72.9	*1.27*	***Poor***
		Yes	36	27.1		
4	**There is a medical examination card for workers in the canteen**	No	94	70.7	*1.29*	***Poor***
		Yes	39	29.3		
5	**Wearing face mask and rubber gloves for the workers in the canteen**	No	118	88.7	*1.11*	***Poor***
		Yes	15	11.3		

6	**There is a health education certificate for workers in the canteen**	No	98	73.7	*1.26*	***Poor***
		Yes	35	26.3		
Overall evaluation		**Poor**	**99**	**74.4**	***1.27***	***Poor***
		Fair	**22**	**16.5**		
		Good	**12**	**9.0**		

Level of Assessment (Poor =1-1.33; Fai r=1.34-1.66; Good =1.67-2)

Table showed that the poor schools structure related to canteen as indicated by low mean of scores (*M.s≤1.33*). Schools structure related to canteen were fare at items number (1 and 2) as indicated by moderate mean of score (*M.s=1.34-1.66*).

Table (4-3. I). Overall evaluation of structure standards (elementary schools) (n =133).

School Structure	Freq.	%	*Total Mean*	*Eval*
Poor (*M=55-73.33*)	16	12.1	*1.48*	*Fair*
Fair (*M=73.34-91.66*)	105	78.9		
Good (*M=91.67-110*)	12	9.0		
Total	133	100.0		

The results showed that (78.9%) of the elementary school were fair structure as described by moderate average, which is equivalent to *1.48*.

4.4. Evaluation of Quality Assurance related Process

Table (4-4. A). Evaluation of activity and duties for health care providers (n =32).

List	Items	Responses	No.	%	*M.s*	*Ass.*
1	**Measuring student weight**	Never	*5*	*15.6*	*2.53*	***Good***
		Sometime	*5*	*15.6*		
		Always	*22*	*68.8*		
2	**Measuring student height**	Never	*5*	*15.6*	*2.46*	***Good***
		Sometime	*7*	*21.9*		
		Always	*20*	*62.5*		
3	**Optometry**	Never	*5*	*15.6*	*2.31*	***Fair***
		Sometime	*12*	*37.5*		
		Always	*15*	*46.9*		
4	**Vaccines given periodically**	Never	*8*	*25.0*	*1.93*	***Fair***
		Sometime	*18*	*56.3*		
		Always	*6*	*18.8*		
5	**Documenting all events, medical examinations and school visit reports in special records**	Never	*8*	*25.0*	*2.12*	***Fair***
		Sometime	*12*	*37.5*		
		Always	*12*	*37.5*		
6	**Participation in seminars and meetings which concerning to school health services**	Never	*14*	*43.8*	*1.75*	***Fair***
		Sometime	*12*	*37.5*		
		Always	*6*	*18.8*		
7	**Health education for students**	Never	*8*	*25.0*	*2.00*	***Fair***
		Sometime	*16*	*50.0*		
		Always	*8*	*25.0*		
8	**Environment Assessment**	Always	*14*	*43.8*	*1.78*	***Fair***
		Sometime	*11*	*34.4*		
		Never	*7*	*21.9*		
9	**Coordination with school management to name a health coordinator and assign him responsibility for monitoring all health activities in the school**	Never	*14*	*43.8*	*1.81*	***Fair***
		Sometime	*10*	*31.3*		
		Always	*8*	*25.0*		
10	**Follow-up of students who drop out of school health care**	Never	*19*	*59.4*	*1.50*	***Poor***
		Sometime	*10*	*31.3*		
		Always	*3*	*9.4*		
11	**School Canteen Follow-up**	Never	*10*	*31.3*	*1.96*	***Fair***
		Sometime	*13*	*40.6*		
		Always	*9*	*28.1*		

Level of Assessment (Poor = 1-1.66; Fair = 1.67-2.33; Good =2.34-3)

This table showed that the nurses staff expressed a fair activity and duties as indicated by moderate mean of scores (*M.s.1.67-2.33*) at all studied

items of the scale except, the nurses staff expressed a poor responses at items number (10) as indicated by low mean of scores (*M.s≤1.66*) and good responses at items number (1, 2) as indicated by high mean of scores (*M.s.≥2.34*).

Table (4-4. B). Overall evaluation of health care providers activity and duties

health care providers activities	Freq.	%	*Total Mean*	*Eval*
Inadequate (*M=11-18.33*)	8	25.0	2.01	**Fair**
Fair (*M=18.34-25.66*)	16	50.0		
Adequate (*M=25.67-33*)	8	25.0		
Total	32	100.0		

Fifty percent of the nurses' staff expressed a fair activity and duties as described by moderate average, which is equivalent to *2.01*.

4.5. Evaluation of Quality Assurance Related Outcome

Table (4-5. A). Evaluation satisfaction and acceptance of school principals for school health services (n =133).

List	Items	Responses	No.	%	*M.s*	*Evaluation.*
1	**School health teams are cooperative**	Never	0	0.0	2.67	***Good***
		Sometime	48	36.1		
		Always	85	63.9		
2	**Provide Vaccines**	Never	41	30.8	2.78	***Good***
		Sometime	33	24.8		
		Always	59	44.4		
3	**Optometry**	Never	38	28.6	2.62	***Good***
		Sometime	36	27.1		
		Always	59	44.4		
4	**Provide Medical glasses**	Never	105	78.9	1.23	***Poor***

		Sometime	26	19.5		
		Always	2	1.5		
5	**Hearing Examination**	Never	46	34.6	1.94	***Fair***
		Sometime	59	44.4		
		Always	28	21.1		
6	**Provide hearing devices**	Never	108	81.2	1.24	***Poor***
		Sometime	23	17.3		
		Always	2	1.5		
7	**Don't needs to visit another clinic for treatment your health problem**	Never	17	12.8	2.14	***Fair***
		Sometime	82	61.7		
		Always	34	25.6		
8	**School environment screening and determine appropriate solutions**	Never	69	51.9	1.92	***Fair***
		Sometime	46	34.6		
		Always	18	13.5		
9	**Checking school canteen**	Never	44	33.1	2.27	***Fair***
		Sometime	29	21.8		
		Always	60	45.1		
10	**School canteen with healthy conditions**	Never	26	19.5	2.35	***Good***
		Sometime	32	24.1		
		Always	75	56.4		

Level of Assessment (Poor =1-1.66; Fair = 1.67-2.33; Good = 2.34-3)

This table showed that the school teachers expressed a fair satisfaction towards primary school health services as indicated by moderate mean of scores (*M.s= 1.67-2.33*) at items of the (*Hearing Examination, Don't needs to visit another clinic for treatment your health problem, School environment screening and determine appropriate solutions and Checking school canteen).* school teacher expressed a poor responses in terms of (*Provide Medical glasses, Provide hearing devices*) as indicated by low mean of scores (*M.s≤1.66*), as well as, the good responses in terms of (*School health teams are cooperative, Provide Vaccines, Optometry and School canteen with healthy conditions)* as indicated by high mean of scores (*M.s≥2.34*).

Table (4-5. B). Overall evaluation of satisfaction and acceptance of school principals for school health services

Outcome	Freq.	%	*Total Mean*	*Eva*
Unsatisfied (*M=10-16.66*)	12	9.0	*2.11*	*Fair*
Somehow (*M=16.67-23.33*)	86	64.7		
Satisfied (*M=23.34-30*)	35	26.3		
Total	133	100.0		

The results in this table showed that (64.7%) of the school principals are expressed as somehow satisfied towards elementary school health care services as described by moderate average, which is equivalent to *2.11*.

Table (4-6 .A): Relationship between Activities health care providers and their Socio-demographic Characteristics

Socio-demographic variable		Activities			Total	d.f	*Sig.*	
		Inadequate	Fair	Adequate				
Sex	Male	4	8	5	17	2	χ^2 =0.376 P-value=0.828	NS
	Female	4	8	3	15			
	Total	8	16	8	32			
Age	20-29	2	6	1	9	6	χ^2 =4.722 P-value=0.580	NS
	30-39	2	7	3	12			
	40-49	3	3	3	9			
	50 and older	1	0	1	2			
	Total	8	16	8	32			

Educated Level	Nursing school	1	0	2	3	6	χ^2 =6.712 P-value=0.348	NS
	Preparatory of nursing	5	8	3	16			
	Diploma	1	7	3	11			
	Bachelor	1	1	0	2			
	Total	8	16	8	32			
Experience	<5 years	2	11	3	16	4	χ^2 =6.734 P-value=0.151	NS
	5-10 years	4	5	4	13			
	>10 years	2	0	1	3			
	Total	8	16	8	32			
Training	Yes	4	2	5	11	2	χ^2 =7.065 P-value=0.029	S
	No	4	14	3	21			
	Total	8	16	8	32			

"χ^2 = Chi-square, Df= Degree of freedom, P-value= Probability value, S= significant, NS= non-significant"

This table indicates that there is no relationship between nurses staff activities and duties in primary health care centres and their socio-demographic characteristics (**Sex**, **Age**, **Educated, Experience)** at *p-value >0.05*. While relationship between nurses' staff activities and duties in primary health care centres and **Training** a appear significant relationship at *p-value < 0.05*.

Table (4-6 .B). Relationship between School Principals Satisfaction and their Socio-demographic Characteristics

Socio-demographic variable		**Outcome**			**Total**	**d.f**	***Sig.***	
		Unsatisfied	**Somewhat**	**Satisfied**				
Sex	Male	20	51	14	85	2	χ^2 =2.526 P-value=0.283	**NS**
	Female	17	26	5	48			
	Total	**37**	**77**	**19**	**133**			
Age	<30	0	3	0	3	6	χ^2 =16.976 P-value=0.009	**S**
	30-39	3	27	0	30			
	40-49	3	21	11	35			

	50 and older	6	35	24	65			
	Total	**12**	**86**	**35**	**133**			
Educated Level	Preparatory academy	0	0	2	2	6	χ^2 =11.860 P-value=0.065	**NS**
	Teacher institute	5	40	21	66			
	Bachelor	7	39	12	58			
	Higher Diploma	0	7	0	7			
	Master & above	0	0	0	0			
	Total	**12**	**86**	**35**	**133**			
Training	Yes	2	50	28	80	2	χ^2 =15.364 P-value=0.00	**S**
	No	10	36	7	53			
	Total	**12**	**86**	**35**	**133**			

"χ^2 = Chi-square, Df= Degree of freedom, P-value= Probability value, S= significant, NS= non-significant"

This table indicates that there is no relationship between satisfaction of school administrative toward school health services provide by primary health care centres and their socio-demographic characteristics (**Sex and Educated)** at *p-value >0.05*.

But there is a significant relationship between satisfaction of school administrative toward school health services provide by primary health care centres and their socio-demographic characteristics (**Age and Training)** at p-value < 0.05.

Table (4-7): Tests of Normality by using Kolmogorov-Smirnova (K.S)

	Kolmogorov-Smirnov		
	Statistic	df	Sig.
Structure	.084	30	.200*
Process	.066	30	.200*
Outcome	.181	30	.140*
*. This is a lower bound of the true significance.			

This table show that a normal distribution of tested variables.

Table (4-8): Statistical correlation between Outcome and Structure of PHCCs

		Value	Asymptotic Standard Error[a]	Approximate T[b]	Approximate Significance
Interval by Interval	Pearson's r	.499	.069	6.583	.000
N of Valid Cases		133			

This table showed that Pearson's r exhibited a statistically significant positive correlation between outcome of quality assurance for school health services with regard Structure of primary health care centres (*R=0.*499*; p=0.000*).

Chapter Five
Discussion of the Results

Chapter Five

Discussion of the Results

In this chapter there will be a regular discussion to the results of the study and a reasonable interpretation of the results that have emerged with evidence from literature and related studies.

5.1. Sociodemographic characteristics of the study participants:

Throughout the course of data analysis, the sociodemographic characteristics of the study sample enrolled in this study is divided into:

5.1.a. Socio-Demographic Variables of Nurses Staff:

The distribution of the sociodemographic data of the nursing staff are shown in Table (4-1. A) as frequencies and percentages. Out of (32) subjects participating in this study were male (53.1%) whose age ranged from 30-39 years old (37.5%). This result agrees with a descriptive study was done to determine the influence of a quality improvement program on the performance of nurses' staff in primary health care centers at Baghdad City's, the majority of the client is male (58%) and between the ages of (30– 39) (Awad & Khalifa, 2015). That may be the Iraqi society traditions consider nursing is a difficult job for female nurses.

The present study also shows that (50%) of nursing is preparatory of nursing in graduated. These results are supported by the study of (Juma & Abdulwahid, 2022) in that they an indicate that QA of the primary healthcare services at the main PHCCs findings demonstrated that half of the respondents were secondary school graduates (50%).

Regarding training, the present study shows that (65.6%) of nurses in school health services unit are without training. This result agrees with the study of (Manthoor, 2014) regarding evaluation of the organization structures that reveals that (79.1%) from nurses' staff express inadequate experience.

The reason for this may be because of the Research and Development Center, where the training courses regarding school health are not intensified and the focus is on other programs in the health center or on nurses who work in hospitals.

5.1.b. Socio-Demographic Variables of Teachers Administrative Staff:

According to data analysis of participant demographics (Table 4-1. B), the participants were recruited from the (133) school principals involved in the study and were mostly men (63.9%) and over the age of 50 (48.9%). This conclusion is consistent with that of (Elywy, 2016), who found that (59%) of school administrators were men and (42%) were between the ages of (40-49).

This is due to the fact that the education departments assign teachers who have accumulated experience in how to manage the school, so find most of the school principals at the age of fifty.

Also, present study shows that majority of the school principals are teacher institute (49.6%) and had training (60.2%) (Table 4-1. B). While the study of (Abdulla et.al., 2018) in that they studied evaluation of SHS for students in the Primary School, in which their finding indicated that most of the study sample were (45.3%) bachelor graduated, (41.2%) of them had training course related school health services. According to opinion, there is a lack of interest by some schools' principals regarding the health aspect and lack of follow-up of health factors because knowing the health aspects is one of the most factors that help the student and the parents to continue in school and achieve good performance and good grades.

5.2. Discussion of Quality Assurance related to Structure

5.2. a. Primary health care centres structure availability of supplies and resources

In this domain, the result of present study showed the fair primary health care centres structure as indicated by moderate mean of scores

(M.s.1.34-1.66) at all studied items of the scale except, the poor primary health care centres structure in terms of (availability of computer, availability of vaccines, availability of medical supplies and laboratory materials and waste management supplies) as indicated by low mean of scores (M.s=1-1.33) Table (4-2. A).

This result is consistent with Al- Miahi's (2010) show that the majority (>85%) of primary healthcare centers have access to medical supplies, laboratory supplies, drugs, and vaccinations, while this result contrasts with study conducted in the Baghdad Governorate in 2005 by Al-Khudhairi, who found that essential medical supplies are few (17%) in several healthcare systems. This is most likely a result of the time study difference**.**

Also, the results obtained from the same table showed good primary health care centres structure in terms of (number of rooms in the health centre is sufficient, there is a special room for the school health unit, availability of lecture room, availability of length measure and availability of medications) as indicated by high mean of scores (M.s=1.67-2).

These results are supported by the study of (Manthoor, 2014) regarding evaluation of the organization structures which reveals that most of the school health services units in primary health care centers have experienced good organization structure (73%).

Regarding the item *is the health center far from the nearest hospital* appear fair with mean score 1.50. This finding is consistent with a study conducted by Al-Miahi (2010), which found that the majority of primary healthcare facilities (63.6%) were situated close to the sectors.

Further findings from this table revealed that 50% of the main healthcare centers under study lacked an ambulance. This outcome is consistent with AL-Khudhairi's (2005). observation that not all healthcare systems have ambulances.

5.2. b. Discussion overall of primary health care centres structure availability of supplies and resources

The analysis of the study's data has shown an indication that (66.7%) of the main primary health care centres structure were fair availability of supplies and resources as described by moderate average, which is equivalent to *22.83* total mean. These occurred may be lack of planning and management: There may be a lack of planning and management of health services in health centres, which affects the effective direction of capabilities and efforts.

These results are supported by the study of (Juma & Abdulwahid, 2022) in that they are an indication that the QA of the primary healthcare services at the main primary healthcare centers' findings demonstrated that the (70%) of PHCCs is within a high level. while Structure of Sub PHCCs (70%) of them demonstrates a moderate level.

While another study with (600) patients and (150) health professionals participated in a cross-sectional survey in Al Ramadi City, West of Iraq, to appearance at the structure, customer satisfaction, and quality of primary healthcare, the overall adequacy ratings for the availability of structure in the main and sub-centers are 71.3% and 72.5%, respectively (Sarhan & Altaha, 2017).

5.3. Discussion of structure standards of elementary schools

5.3. a. Discussion of structural building of the elementary school

The overall evaluation score for this domain was fair with the mean score (1.65). In which higher mean score were good at items (The school yard is present) with mean score 1.92. while lower mean score was poor at items (Rainwater is drained from the squares regularly (connected to a sewage system) with mean score 1.31. Table (4-3. A).

The lack school infrastructure in Iraq can be attributed to several factors, may be because conflicts and wars: The ongoing conflicts and wars that Iraq

has witnessed over the years have led to the destruction of many schools and damage to existing infrastructure.

This result does not agree with the survey study conducted in the city of Damascus on twenty-one schools entitled the quality of the physical environment of the school and its relationship to environmental activities. The study showed that one-third of the school sample (33.3%) enjoyed a good location. With more than half the number of schools(52%) are of good construction. The indicators of the location and the suitability of the building together reached a good level of (45.5%) (Maalouli, 2010).

While the study that was showed on the schools of the Hilla city, the data for the research were collected from (13) primary schools distributed within the scope of the governorate center, Babel, titled Constructional Evaluation of Primary Schools Buildings in Al-Hilla City, the data collected by interviews with specialist from teachers as well as administration, where most of the respondents agreed that the location of the school buildings is appropriate for the purpose for which they were established with a rate of (87%), and that most of the schools were built on public streets and it is easy to access them, and this is a positive point in choosing School sites, except for a very small percentage (3%), where access to the school building interfered with puddles of water, creeks, or Unpaved roads or irregular ditches, some of which pose a danger to students (Al-Daami & Khudair, 2009).

The current study in the same table also indicated (68.4%) from structural building of the primary school included in the study have cracks or demolitions in the school building (classes + School Roof). While the study into the schools in Hilla city appeared most of the schools in the city of Hilla suffer from moderate cracks, with a score of (42%) (Al-Daami & Khudair, 2009).

5.3. b. Discussion of classrooms and halls:

Overall evaluation of this domain appears in Table (4-3. B) which indicted for the fair schools' classroom and halls by moderate mean of scores 1.45. Schools classroom and halls were poor at items {seats and desk are proportional to the number of students (one desk per student)}as indicated by low mean of score (*M.s ≤1.33*) and schools' classroom and halls were good at items (Distance between blackboard and front row of the students regular (1.5 - 2 m) at least) as indicated by high mean of scores (*M.s ≥1.67*).

This result is consisted with the study a number of primary schools conducted in Baghdad governorate by (Al-Saadi and Jallab . 2017) entitled "The Impact of the School Environment on the Quality of Primary Education" and included a sample the study (13) is an elementary school. The researcher conducted interviews with school administrations and teachers, and the researcher reached many conclusions regarding the construction of schools, classroom windows placed in a suitable place, classroom ventilation good and the lighting of the classroom was also good, with a percentage of 96% of the study sample. Regarding the item, there are appropriate and sufficient chairs for the number of students in the class, the answers of the participants in the study were 100% (no) to all schools in the study, as there is no school that has a sufficient and appropriate number for the number of students, and all schools suffer from a shortage.

In the same table, the results showed that (57.1%) of the classroom space is insufficient for students in the schools included in the study: (ideally 1 - 1.5 meters for each student) and this result agreed with the study conducted by the Directorate of Education in Karbala Governorate by (Al-Masoudi & Al-Hilali. 2019) it showed that the number of students in one class (45) students, which is more than (60) %, and this indicates the actual need for buildings.

5.3. c. Discussion of water and sanitation:

In terms of statistical mean, Table (4-3. C) demonstrated that the good schools' water and sanitation as indicated by high mean of scores (M.s ≥1.67). Schools water and sanitation were fair at item (*Number of drinking water taps is sufficient for the proportion of students: (a faucet for every 50 pupils*) as indicated by moderate mean of score (M.s 1.34-1.66).

This result is consistent with research by (Al-Darwish, 2006) in Deir Ezzor Governorate in Syria aim to diagnose the conditions of school buildings in the governorate, the study concluded that drinking water does not reach half of the schools (33 schools out of 65 schools) and about a third Schools drink its students are supplied with water from tankers. It is water that is not guaranteed in terms of its safety. There is a significant shortage in the number of drinking water taps and there is also a shortage of number of toilets.

Also, Table (4-3. C) shows the lowest mean score in the domain of water and sanitation appear in item (*Soap and hand sanitizers are available*) with mean score 1.44. with 55.6% from schools in the study not available soap and hand sanitizers.

This result agrees with the survey study conducted by (Maalouli, 2010). in the city of Damascus on twenty-one schools entitled "quality of the physical environment of the school and its relationship to environmental activities". The findings of this study demonstrated the lowest levels of hygiene are found in the students' toilets, where 57% of them are non-existent hygiene and 77% of school bathrooms do not use cleaning materials.

The study that was conducted by (Alanbari& Alnajari, 2015) in the city of Hilla under the title "Assessment of Safety and Security Measures within the School Environment in Hilla City" where the overall number of schools in the case of the study was ten schools within the city of Hilla (three primary, three intermediate, and four secondary and preparatory schools for boys and girls) to

conduct a field survey on them. It was found that %90 of the schools in the study did not have litter boxes, hand towels and soap of the fixed type.

A similar study conducted in Mesan Governorate/Iraq and with the Dubai International Humanitarian Aid and Development report" About two thirds of elementary schools in underdeveloped nations lack basic sanitation and more than half lack adequate water facilities (UNICEF, 2010). It reflects the highly neglected school health supervision services.

5.3. d. Discussion of dealing with waste:

In terms of statistical mean, Table (4-3. D) demonstrated that the fair evaluation for this domain which schools deal with waste as indicated by moderate mean of scores (*M. s=1.34-1.66*). Schools dealing with waste were good high mean of score (*M.s*≥1.67) at items number (*Collects waste in right method* and *Waste is collected regularly daily*) This finding is confirmed by a study by Abdulla et al. (2013) titled Evaluation of primary schools' environments in Erbil city, which found that 90% of the schools had standard garbage containers in the majority of them.

Regarding the item (*Trash cans opened through the foot are available)* in the same table above appear poor as indicated by mean of score (*M.s≤1.33*) 72.2% not available in current study .While (Al-Tuhafee & Al-Taee, 2012) conducted study "Assessment of physical environment of primary schools in Mosul city"and showed Regarding environmental sanitation parameters; (48 %) from primary school present Not standard garbage container (standard garbage containers must have a lid). Also appear (12%) of schools found without garbage containers,

5.3. e. Discussion of insect and rodent control:

In terms of statistical mean, Table (4-3. E) demonstrated that the poor schools insect and rodent control as indicated by low mean of scores (*M.s≤1.33*), which show majority of the school is not sprayed with pesticides by health teams 72.9 %.

This result supported the study conducted by (Al-Daami & Khudair, 2009). In Al-Hilla city to evaluate the building of the primary schools according to the construction, function and diagnoses of the construction problems, concluded that more than (60%) of the selected school buildings it suffers from medium and large damage from termites.

5.3. f. Discussion of clean workers:

The overall evaluation of this domain appears poor evaluation in the Table (4-3. F) this indicate poor schools services workers by low mean of scores (*M.s≤1.33*). This result is consistent with the results of the study (Abdel Hafeez and Al-Khawaldeh, 2019), which concluded that many schools suffer from a shortage of cleaning workers. Also consistent with the results studied (Al-Sarairah & Al-Rashidi, 2012).) This study was aimed at investigating the state of school health in the State of Kuwait from the perspective of female administrators and teachers, that concluded that the level of general hygiene in the school community is moderated, due to the lack number of cleaning workers.

This finding can be explained by the fact that school students make up a large percentage of the population, and these schools are clusters that grow from various parts and geographical spots that facilitate the spread of diseases in them widely if the appropriate number of workers is not provided to carry out the cleaning of the school, as it is their task to carry out by cleaning the school and transporting garbage to gathering places daily, if the appropriate number of workers is not available, this may lead to a lack of hygiene and the spread of diseases in the school community. The state spends a lot of effort, money and time in the field of school health.

5.3. g. Discussion of medical supplies and safety requirements:

In terms of statistical mean, the overall evaluation of this domain is poor Table (4-3. G) demonstrated that the poor schools medical supplies and safety requirement as indicated by low mean of scores (*M.s≤1.33*) in all items. In

which 77.4 % from schools in the current study not present safety requirement such as (First aid box 68.4%, Fire extinguishers are 74.4 %).

This finding can be explained by the fact that school principals are not aware of providing safety rules for students, as they may focus on paying attention to these rules after the occurrence of the event or crisis. These results support the findings of (Al Nairi, 2015) that there is a shortage in providing students with a level of safety in schools. It also agrees with the findings of the study of (Turan, & Turhan, 2012), which revealed the existence of some risks that threaten school security.

The study conducted by (Maalouli, 2010) in the city of Damascus on twenty-one schools entitled "quality of the physical environment of the school and its relationship to environmental activities". The results of this study demonstrated, the lowest safety indicators in the sample schools are concentrated in the lack of pharmaceutical materials by 32% of the schools. It also showed that there is a lack of precautions fire prevention decreases by 13.6% of the schools in the sample. Also, the study showed that female schools suffer severely from a lack of fire prevention precautions 63.6 % of them can be classified as low level. While a 2010 survey by Omolo in the Kenyan districts of Kisumu East and West found that 96.6% of schools had first aid kits.

5.3. h. Discussion of canteen:

Table (4-3. H) demonstrated that the overall evaluation related to canteen in elementary schools appear poor evaluation as indicated by low mean of scores (*M.s≤1.33*), (74.4%). Highest mean of scores in the same table appear in item (The *canteen is available)* This means that 36% of the elementary schools in the study have a canteen and 63.9% of the elementary schools not available canteens. While Abdulla, et.al. 2013 conducted study entitle Assessment of primary schools' environment in Erbil city indicated that 6% of schools not available canteens and 90% of schools available /Nonstandard canteens, 4% available /standard canteens. A safe, hygienic, productive, and offering a variety

of dishes with excellent nutritional content were all considered to be characteristics of a healthy canteen.

Also, current study appears (88.7 %) from the workers in the canteen not wearing face mask and rubber gloves. The results of a study in Thailand by Phyu et al. (2019) with the title "Food safety assessment of food handlers in the canteens of Khon Kaen University" revealed that over 90% of the food handlers had good personal hygiene attitudes, such as the use of masks, gloves, and caps as a way of preventing and reducing the risk of food contamination. In addition, 75% of the food handlers had experience attending hygienic practices training.

In the Malaysian study "Knowledge, Attitudes and Practices of Food Handlers on Food Safety in Food Service Operations at the University Kebangsaan Malaysia" done by Sani and Siow (2014), it was found that the majority of food handlers did not use gloves or masks when handling foods. Also, (36%) food workers exposed their hair.

Other study by (Ahmed, 2017) in Sudan to evaluated the knowledge, attitudes, and behaviors of the University of Science and Technology's food handlers' canteen with relation to food safety and cleanliness, which showed workers wear gloves during employment at an equal rate of 50%, but those wearing hats 46% and nose masks 36%.

5.3. i. Discussion overall evaluation of structure standards (elementary schools):

According the results showed in the Table (4-3. I) regarding the overall evaluation of structure standards of elementary schools appear that (78.9%) of the elementary school were fair structure as described by moderate average. This finding was in accordance with the studies done by the (Al-Masoudi & Al-Hilali. 2019) under the title "The reality of school buildings and its impact on the educational reality of the holy city of Karbala in accordance with the overall

quality standards). In which appeared lack of conformity of many schools to the overall quality standards, including the presence of large numbers in the classroom.

While the study conducted in Iraq by the researcher (Al-Saadi and Jallab . 2017), The study goal was to identify the reality of the educational environment in primary schools .It is the findings of this study showed a severe shortage in school buildings in light of the overcrowding in classrooms and the inability of the Directorate of Education to cope with the resulting increase in the city's population.

Study of the Ministry of Education in the Syrian Arab Republic, (2015) entitle environmental reality of primary schools in the Syrian Arab Republic, in the fifth and sixth grades Elementary". The study objective to identifying the reality of environmental education in primary schools, and identifying weaknesses and strength. The study's findings showed that the reality of the educational environment of the primary school at the general level as total percentage was 63% in all governorates of the sample, and it varies between governorates, and it showed levels of environment elements; classrooms, health safety... between 55% and 75%.

The researcher thinks that the reason for this is due to the ministry's lack of interest in school buildings, as well as the large increase in the number of students.

5.4. Discussion of Quality Assurance related Process

5.4.a. Discussion of activity and duties for nursing staff.

Table (4- 4. A) demonstrated that the nurses staff expressed a fair activity and duties as indicated by moderate mean of scores (*M.s.1.67-2.33*) at all studied items of the scale except, the nurses staff expressed a poor responses at items (*Follow-up of students who drop out of school health care*) as indicated by low mean of scores (*M.s≤1.66*) 59.5%. and good responses at items number

(*Measuring student weight and height*) as indicated by high mean of scores (*M.s.≥2.34*), 68.8 %, 62.5% respectively.

This result is consistent (Manthoor, 2014) in Babylon Governorate to evaluated activity to the nursing staff and inducted that fair evaluation regarding the item (Weight measure. Height measure) with mean of score 1.90 for both items.

While the study conducted by (Mohaisen, 2020) in Hilla City's to evaluation of Quality Assurance for Integrated Management of Childhood Illness Program showed (45.4%) of health care workers measure the child's weight and (46.2%) of them are checking the child immunization status.

5.4.b. Discussion overall of nursing staff activity and duties.

The overall evaluation of nursing staff activity and duties appear in the Table (4-4. B). which showed that (50. 0 %) of the nurses' staff expressed a fair activity and duties as described by moderate average.

This result is agreed with the study conducted in Babylon Governorate by (Manthoor, 2014). Which indicates that the quality assurance for the nursing staff is fair (49%) services. Furthermore (Al-Maihi's, 2010) conducted study, in Baghdad, has found that the quality is determined as fair for more than one third of the nursing services (40%), it is approximately agreed with the present study.

While the results of (Abdulwahid, 2022) study on the evaluation of quality assurance at the main primary health care centres in Basra City showed that the (80%) of quality assurance related to services provided by main primary health care centres is within a good level, the results of the study on the sub-primary health care centres showed that the (60%) of such assurance related to services provided by sub-primary health care centres are within a fair level.

The results lack of school health services has emerged may be due to the inefficiency of school health staff, and also the staff work in more than one area at the health centres.

5.5. Discussion of Quality Assurance related Outcome:

5.5.a. Discussion satisfaction and acceptance of school principals for school health services.

Table (4-5. A). Demonstrated that the school principals expressed a fair satisfaction towards elementary school health services as indicated by moderate mean of scores (M.s= 1.67-2.33) at items of the (*Hearing Examination, Don't needs to visit another clinic for treatment your health problem, School environment screening and determine appropriate solutions and Checking school canteen*). School principals expressed a poor responses in terms of (*Provide Medical glasses, Provide hearing devices*) as indicated by low mean of scores (M.s≤1.66), as well as, the good responses in terms of (*School health teams are cooperative, Provide Vaccines, Optometry and School canteen with healthy conditions*) as indicated by high mean of scores (M.s≥2.34). That mean the highest M.S appear at item (*Provide Vaccines*). While lowest M.S appear at item (*Provide Medical glasses and Provide hearing devices*)

These findings are consistent with Nasser's (2013) to Evaluation of School Health Programmes research conducted in the Missan Governorate of Iraq, which revealed that only 6.3% of primary healthcare facilities do hearing examinations. However, 2014 research by Manthoor in the Babylon Governorate of Iraq demonstrated the significance of documentation and immunization delivery.

5.5.b. Discussion overall evaluation of satisfaction and acceptance of school principals for school health services.

Table (4-5. B) contains the findings of the current investigation and reveals that (64.7%) of the school principals expressed a somehow satisfied towards elementary school health care services by the primary health care as described by moderate average, this result is in line with the conclusions explored by (Al-Sarairah & Al-Rashidi, 2012) under the title "School Health

Level in Primary Schools in the State of Kuwait from the Perspective of Female Principals and Teachers". The results showed that the level of school health from the point of view of female teachers was moderate. Also, our result agrees with the results of the study (Al. Suabe, 2009) which showed that there was a moderate level of school health among the study sample.

Also, our findings were consistent with (Elywy, 2016), which revealed that the school principals' general replies concerning the accessibility of the school health services were just partially satisfied at all domains of school health services.

Al-kerety (2011) in Holy Karbala Governorate conducted study to determination the QA for Primary Health Care Services shows that more than half (59%) of consumers were dissatisfied. While (Raddam, 2017) in AL-Najaf AL-Ashraf Governorate conducted study to identify QA of essential primary health care services at PHCCs regarding consumers satisfaction about services provided, indicated that (40%) of consumers surveyed said they were satisfied about services provided.

5.6. a: Relationship between Health & Nurses Staff Activities and their Socio-demographic Characteristics.

Table (4- 6.A) In the current study indicate that there was no relationship between nurses' staff activities and duties in primary health care centres and their socio-demographic characteristics (Sex, Age, Educated, Experience) at *p-value >0.05*. While relationship between nurses' staff activities and duties in primary health care centres and training a appear significant relationship at *p-value <0. 05.*

This result is concurrent with the study conducted in Al-Najaf city, Iraq by (Aljanabi, etal. 2022) aimed to determine the effects of nurses' sociodemographic such as (gender, level of education, age, years of services, work place, training course, and shift time, source of educate themselves) on

their clinical performance. the results showed no significant relation between (age, gender, training course, shift time, source of educate themselves) and their performance.

These results of the current study are reasonable because the training tools for school health services lead to an increase in knowledge and increase their practical capabilities in performing their duties.

Additionally, the age, educational background, and present position of the nurses did not significantly affect their professionalism, according to a Saudi Arabian study titled "Relation between Socio-Demographic Factors and Professionalism Among Nurses" by (Alshumrani et al., 2022).

5.6.b. Relationship between School Principals Satisfaction and their Socio-demographic Characteristics.

Table (4-6 .B) indicate that there was no relationship between school principal's satisfaction towards school health services in PHCCs and their socio-demographic characteristics (Sex and Educated) at *p-value > 0.05*. But there is a significant relationship between school principal's satisfaction towards primary school health services in PHCCs and their socio-demographic characteristics (Age & Training) at p. value < 0.05.

The result of this study was similar to that recorded by (Elywy, 2016), in that stated there was no statistically significant correlation between the demographic characteristics of the principals and their satisfaction with school health services.

Additionally, (Abdulla et al., 2018) found no statistically significant relationship between participating principals' demographic variables, including age, Sex, school type, and whether or not they had taken school health-related training courses, as well as the number of training sessions.

Also, our result agrees with findings of (Abdulwahid, 2022) in basra city, Iraq in which shown that no significant differences existed in consumers'

satisfaction with PHCCs regarding their age groups (P=0.187), gender (P=0.476), an education level (P=0.583). Also in Babylon Governorate study, which show that there is no significant statistical link between consumer satisfaction with healthcare providers' demographic data (Radhi & Khalifa, 2016).

While the study performed by (Manthoor, 2014) in Babylon governorate, Iraq. regarding school health services showed the Consumer's satisfaction with school health services, has been influenced by their age.

5.7. Statistical Correlation between Outcome and Structure of PHCCs.

Table (4-8) showed The Pearson's r correlation there were a statistically significant positive correlation between outcome of quality assurance for school health services with regard structure primary health care centres (*R=0.*499*; p=0.000*).

This result agrees with the study conducted by (Ameh, 2017) in a rural South African to determine how structure, process, and result are related in order to evaluate the effectiveness of integrated chronic illness management, in which showed that Structure (equipment, critical drugs, accessibility) correlated with outcome (competence, confidence and coherence).

In addition, that it was challenging to determine the relationship between processes and outcomes and that, in contrast to investigations on structures, processes were frequently poorly described in studies (Fleury, et.al., 2020).

According to opinion, the current results are considered acceptable due to the importance of the primary health center's structure in increasing satisfaction with the health services provided by these centers. It is considered a positive relationship, as when the quality of the structure increases, the satisfaction of the customers also increases.

Chapter Six
Conclusions and Recommendations

Chapter Six

Conclusion and Recommendations

This chapter includes the most important recommendations that should be taken into consideration as well as the key findings and conclusions of the current study.

6.1. Conclusions:

Based on the results of the study and its discussion, as well as interpretation of the results, the current study has concluded that:

6.1. 1. Overall evaluation of the quality assurance related to structure of primary health care centres were fair availability of supplies and resources in the present study.

6.1. 2. There is lack of equipment specially a computer for electronic documemtation, vaccines, waste management supplies, medical supplies and laboratory materials at the PHCCs.

6.1. 3. Overall evaluation of the quality assurance related to structure of elementary school were fair in the present study.

6.1. 4. There is a fair evaluation for the following domain (structural building of the school, classrooms and halls, dealing with waste) regarding structure standards of elementary schools.

6.1. 5. There is a poor evaluation for the following domain (insect and rodent control, clean workers, medical supplies and safety requirements and canteen) regarding structure standards of elementary schools. While only one domain (water and sanitation) have good evaluation.

6.1. 6. Overall evaluation of quality assurance related to process (Nursing and health staff's activity and duties) were fair in PHCCs regarding school health services.

6.1. 7. There is lack of Follow-up of students who drop out of school health care by Nurses and Health staff in PHCCs.

6.1.8. Overall evaluation of quality assurance related to outcome (satisfaction and acceptance of school principals) expressed a somehow satisfied towards elementary school health care services.

6.1.9. There is lack of provide medical glasses for students at the primary health care centers.

6.1.10. There is a significant relationship between nurses' staff activities and duties in primary health care centres and training course.

6.1.11. There is a significant relationship between school administrative satisfaction towards primary school health services in PHCCs and their socio-demographic characteristics (Age and Training).

6.1.12. There is a significant positive correlation between outcome of quality assurance for school health services with regard structure of PHCCs.

6.2. Recommendations:

Based on the above conclusions, the present study can recommend that:

6.2. a. Periodical monitors the school environment by staff of school health unit in the primary health care centers and focuses on the following domain: insect and rodent control, clean workers, medical supplies and safety requirements and canteen

6.2. b. Activation of relationship between school health unit and schools' administrations to accomplish better school health services.

6.2. c. Increasing training courses program for health staff working in the school health units.

6.2. d. Involve schools' principals in training courses program related to school health services.

6.2. e. Paying attention to the follow-up of students who drop out and who do not benefit from the services of health care centers through frequent visits to schools by health and nursing staff.

6.2. h. Equipping health centers with essential supplies such as computers, vaccines, waste management supplies, medical supplies and laboratory materials in primary health care centers to provide integrated services for students.

6.2. f. Screening seriously at 6 years age and reinforcement of supplies, such as eye glasses and hearing devices in order to overcome visual and hearing problems.

6.2. j. Further studies can be conducted on large sample size and nationwide oriented.

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Appendices

APPENDIX A1

University of Babylon
College of Nursing
Research Ethics Committee

جـــامـــعة بـــابـــل
كـــلية التمريـــض
لجنة اخلاقيات البحث العلمي

Issue No:

Date: / /2022

Approval Letter

To,
Ghassan Abdul Ameer Washi

The Research Ethics committee at the **University of Babylon, College of Nursing** has reviewed and discussed your application to conduct the research study entitled " **Evaluation of Quality Assurance for School Health Services in Primary Health Care Centers at Al-Numaniyah District**".

The Following documents have been reviewed and approved:

1. Research protocol
2. Research instrument/s
3. Participant informed consent

Committee Decision:

The committee approves the study to be conducted in the presented form. The Research Ethics committee expects to be informed about any changes occurring during the study, any revision in the protocol and participant informed consent.

Prof. Dr. Salma K. Jehad
Chair Committee
College of Nursing
Research Ethical Committee
5 / 7/2022

APPENDIX A2

Ministry of Higher Education and Scientific Research

وزارة التعليم العالي والبحث العلمي

جمهورية العراق

University of Babylon
College of Nursing

جامعة بابل
كلية التمريض
لجنة الدراسات العليا

Ref. No. :
Date: / /

العدد :
التاريخ :

الى / دائرة صحة واسط
م/ تسهيل مهمة

تحية طيبة :
يطيب لنا حسن التواصل معكم ويرجى تفضلكم بتسهيل مهمة طالب الدكتوراه (غسان عبد الأمير واشي نعمه) لغرض جمع عينة دراسة الدكتوراه والخاصة بالبحث الموسوم :

تقويم ضمان جودة خدمات الصحة المدرسية في مراكز الرعاية الصحية الأولية في قضاء النعمانية .

Evaluation of Quality Assurance for School Health Services in Primary Health Care Centers at Al – Numaniyah District

مع الاحترام ...

المرافقات //
- بروتوكول .
- استبانة

أ.م . د. نهاد محمد قاسم النوري
معاون العميد للشؤون العلمية والدراسات العليا
2022 /7 / 5

صورة عنه الى //
- مكتب السيد العميد للتفضل بالاطلاع مع الاحترام .
- لجنة الدراسات العليا
- الصادرة .

E-mail:nursing@uobabylon.edu.iq

وطني 07711632208
المكتب 009647711632208

www.uobabylon.edu.iq

APPENDIX A3

وزارة الصحة
دائرة صحة واسط
مركز التدريب والتنمية البشرية
شعبة أدارة المعرفة والبحوث
العدد //٢٤٦
التاريخ /٦/٧/٢٠٢٢

جمهورية العراق

Republic of Iraq
Ministry of Health
Directorate Wasit of Health
Training and developing center

(محمد نبينا اقام دولة العدل والتسامح)

إلى // المؤسسات الصحية كافة
الموضوع // تسهيل مهمة

يهديكم مركزنا أطيب التحيات ...

أشارة الى كتاب جامعة بابل/ عمادة كلية التمريض/ الدراسات العليا/ ذي العدد ٢٣٥٠ بتاريخ ٢٠٢٢/٧/٥
للتفضل بتسهيل مهمة طالب الدراسات العليا/ الدكتوراه(غسان عبد الأمير واشي نعمه) لغرض جمع العينات لأستكمال متطلبات بحثه الموسوم (تقويم ضمان جودة خدمات الصحة المدرسية في مراكز الرعاية الصحية الأولية في قضاء النعمانية)٠٠٠

للتفضل بالاطلاع.....مع الاحترام.

خبير التدريب
مجيد هوير خلف
مدير مركز التدريب والتنمية البشرية
٢٠٢٢/٧/٦

نسخة منه الى :-
- مكتب المدير العام / للتفضل بالاطلاع ..... مع الاحترام.
- مركز التدريب والتنمية البشرية مع الأوليات كافة
- التوثيق (اضبارة البحوث)

البريد لالكتروني لمركز التدريب والتنمية البشرية Email :trs wassit@yahoo.com
مركز التدريب والتنمية البشرية / بناية مركز طيبة النموذجي التدريبي / الطابق الثاني

APPENDIX A4

وزارة التعليم العالي والبحث العلمي
جمهورية العراق
Ministry of Higher Education and Scientific Research
جامعة بابل
كلية التمريض
University of Babylon
College of Nursing
لجنة الدراسات العليا

العدد : ٢٩٤
التاريخ : ٧ / ٧ / ٢٠٢٢

Ref. No. :
Date: / /

الى / مديرية تربية النعمانية
م/ تسهيل مهمة

تحية طيبة :

يطيب لنا حسن التواصل معكم ويرجى تفضلكم بتسهيل مهمة طالب الدكتوراه (غسان عبد الأمير واشي نعمه) لغرض جمع عينة دراسة الدكتوراه والخاصة بالبحث الموسوم :

تقويم ضمان جودة خدمات الصحة المدرسية في مراكز الرعاية الصحية الأولية في قضاء النعمانية .

Evaluation of Quality Assurance for School Health Services in Primary Health Care Centers at Al – Numaniyah District

مع الاحترام ...

المرافقات //
- بروتوكول .
- استبانة

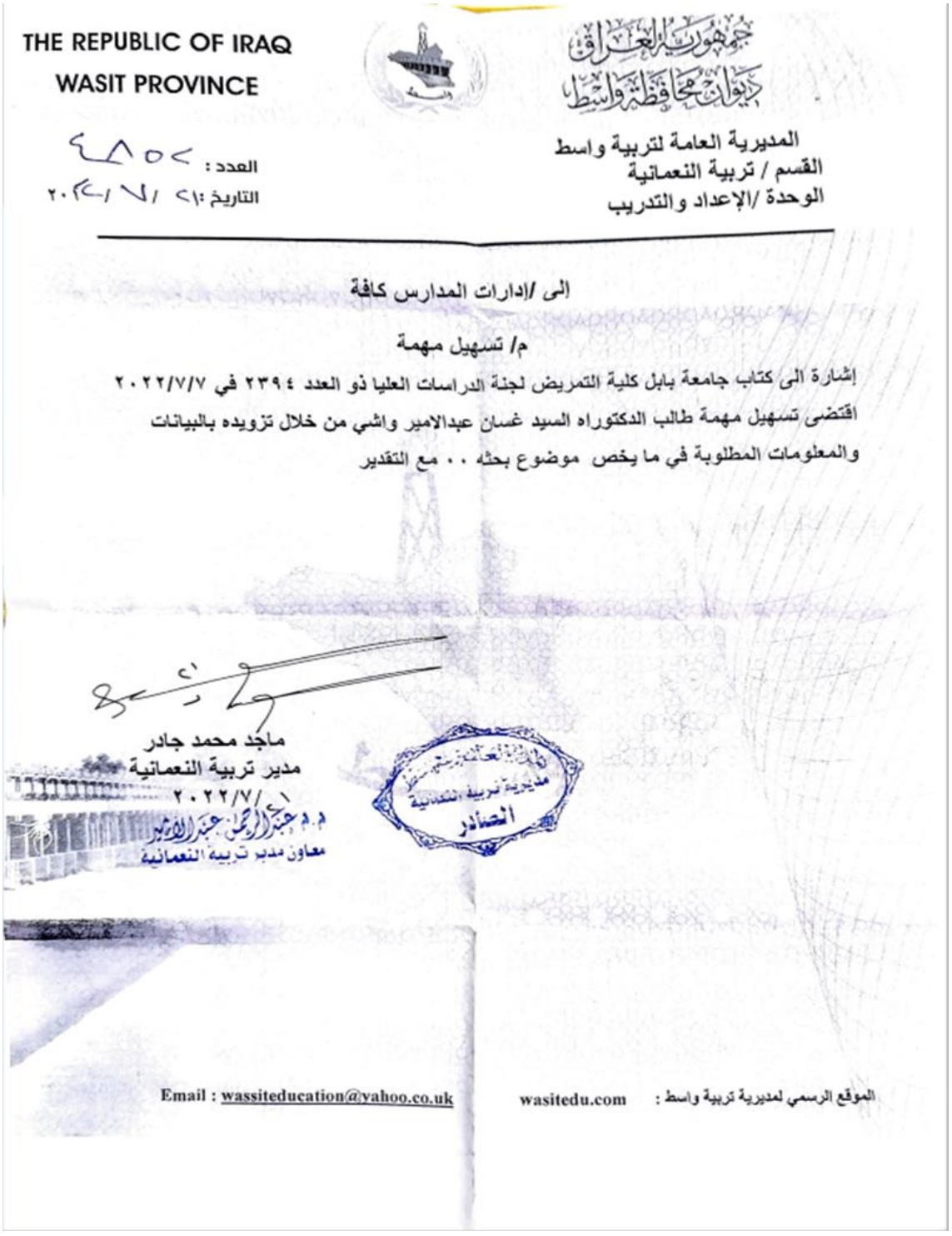
كلية التمريض
المعاون العلمي

ا.م . د. نهاد محمد قاسم الدوري
معاون العميد للشؤون العلمية والدراسات العليا
2022 /7 / 7

صورة عنه الى //
- مكتب السيد العميد للتفضل بالاطلاع مع الاحترام .
- لجنة الدراسات العليا
- الصادرة .

وطني 07711632208
المكتب 009647711632208
E-mail:nursing@uobabylon.edu.iq

APPENDIX A5



THE REPUBLIC OF IRAQ
WASIT PROVINCE

جمهورية العراق
ديوان محافظة واسط

العدد : ٤٨٥٢
التاريخ : ١٤/ ٧/ ٢٠٢٢

المديرية العامة لتربية واسط
القسم / تربية النعمانية
الوحدة /الإعداد والتدريب

الى /إدارات المدارس كافة

م/ تسهيل مهمة

إشارة الى كتاب جامعة بابل كلية التمريض لجنة الدراسات العليا ذو العدد ٢٣٩٤ في ٢٠٢٢/٧/٧ اقتضى تسهيل مهمة طالب الدكتوراه السيد غسان عبدالامير واشي من خلال تزويده بالبيانات والمعلومات المطلوبة في ما يخص موضوع بحثه .. مع التقدير

ماجد محمد جادر
مدير تربية النعمانية
٢٠٢٢/٧/١٤

م.م جنان الرحمن عبد الامير
معاون مدير تربية النعمانية

مديرية تربية النعمانية
الصادر

Email : wassiteducation@yahoo.co.uk

الموقع الرسمي لمديرية تربية واسط : wasitedu.com

APPENDIX A6

وزارة التعليم العالي والبحث العلمي
جامعة بابل
كلية التربية الأساسية

Ministry of Higher Education and Scientific Research
University of Babylon
College of Basic Education

جمهورية العراق

F. No.:
Date: / /

العدد: ٥٦٧٦
التاريخ: ٢٠٢٣/٥/١٤

العدد: ١٧٥٠
التاريخ: ٢٠٢٣/٥/١٥

كلية التربية الأساسية
شعبة شؤون الطلبة

الى/جامعة بابل/كلية التمريض
م/ تقويم لغوي

نهديكم اطيب التحيات ...

كتابكم ذو العدد ١٦٧٤ في ٢٠٢٣/٥/٧ نعيد اليكم اطروحة الدكتوراه للطالب (غسان عبد الامير واشي نعمة) الموسومة بـ (تقويم ضمان جودة خدمات الصحة المدرسية في مراكز الرعاية الصحية الاولية في قضاء النعمانية) بعد تقويمها لغوياً واسلوبياً من قبل (ا. د. عبد علي نايف) وهي صالحه للمناقشة بعد الاخذ بالملاحظات المثبتة على متنها .

... مع الاحترام...

المرفقات //

- اطروحة دكتوراه
- اقرار المقوم اللغوي

جامعة بابل
UNIVERSITY OF BABYLON

أ.د. فراس سليم حياوي
معاون العميد للشؤون العلمية
٢٠٢٣/٥/١٤

نسخة منه الى //

- مكتب السيد العميد المحترم ...للتفضل بالاطلاع مع الاحترام
- ا. د. عبد علي نايف.. للعلم لطفاً.
- الشؤون العلمية
- الصادرة

نادية

STARS
ED FOR EXCELLENCE

العراق - بابل - جامعة بابل
بدالة الجامعة ٠٠٩٦٤٧٢٣٠٣٥٧٤٤
مكتب العميد ١١٨٤
المعاون العلمي ١١٨٨
المعاون الاداري ١١٨٩
وطني ٠٧٢٣٠٣٥٧٤٤
امنية ٠٧٦٠١٢٨٨٥٦٦
basic@uobabylon.edu.iq

APPENDIX B1

Questionnaires (English version)

Evaluation of Quality Assurance for School Health Services in Primary Health Care Centers at Al-Numaniyah District.

Questionnaire(A1): Structure Standards of health centers.

Dear health center manger

I am pleased to put this questionnaire in your hands to get to know your opinion about the structure of the health center.... note that this survey is subject to full confidentiality and thus you can give your opinion with full freedom ... with appreciation

(The form Answered by manager of health center or assistant)

Structure of health center and Availability of Supplies and Materials and Resources

Form number ☐

Primary health care sector ----------

Center for Primary Health Care ----------

1.1. Is the health center far from the nearest hospital

Yes ☐ No ☐

1.2. Are the health center services in the field of school health sufficient to cover the population density Yes ☐ No ☐

1.3. The building is originally designed as a health center

Yes ☐ No ☐

1.4. Number of rooms in the health center is sufficient

Yes ☐ No ☐

1.5. There is a special room for the school health unit

Yes ☐ No ☐

1.6. Availability of lecture room

Yes ☐ No ☐

1.7. Availability of computer

Yes ☐ No ☐

1.8. Availability of optometry supplies

Yes ☐ No ☐

1.9. Availability of Ambulance

Yes ☐ No ☐

1.10. Availability of weight measure

Yes ☐ No ☐

1.11. Availability of length measure

Yes ☐ No ☐

1.12. Availability of medications

Yes ☐ No ☐

1.13. Availability of vaccines

Yes ☐ No ☐

1.14. Availability of medical supplies and laboratory materials

Yes ☐ No ☐

1.15. Waste management supplies

Yes ☐ No ☐

Questionnaire (A2): Structure Standards of Elementary schools.

Dear teacher

I am pleased to put this questionnaire in your hands to learn about the structure of the primary school..... Note that this questionnaire is subject to complete confidentiality and therefore you can give your opinion in your full freedom and there is no need to mention the name..... With appreciation.

(The form Answered by the principal or assistant and by the researcher note also)

Form number

Name of the health center responsible for school----------

A	The structural building of the school	Yes	NO
3.1	The school is far from workshops, gas fields and fuel filling stations.		
3.2	The school is far from generators, electrical wires and mobile towers.		
3.3	The school is far from the water pools.		
3.4	The school is far from any source of noise.		
3.5	School area is proportional to the number of pupils (ideal 10-15 m2) per pupil		
3.6	The school wall is present.		
3.7	The height of the school wall is 2 , 1.8 m		
3.8	The school yard is present.		
3.9	The school yard is regular.		
3.10	Rainwater is drained from the squares regularly (connected to a sewage system)		
3.11	The school garden is present.		
3.12	The school garden is clean.		
3.13	No cracks or demolitions in the school building (classes + School Roof)		
B	**Classrooms and halls**		
3.14	Dimensions of classes is ideal (6m width, 8m length, 4m height)		
3.15	Classes space is enough for students: (ideal 1 - 1.5 m per student)		

3.16	Natural ventilation of the classroom is sufficient (windows area 6/1 - 1/4 classroom space)		
3.17	Artificial ventilation of the classes is present and sufficient		
3.18	The natural lighting of the classes is enough.		
3.19	Artificial lighting of classes is present and enough		
3.20	Hand sanitizers are available in classroom		
3.21	The seats and desk are proportional to the number of students (one desk per student		
3.22	The distance between one desk and another at least more than a meter.		
3.23	The school seats and desk are suitable for student		
3.24	Distance between blackboard and front row of the students regular (1.5 - 2 m) at least		
3.25	Window glass unbroken		
C	**Water and sanitation**		
3.26	water is available		
3.27	Water tanks are present.		
3.28	Water tanks are present and useableness.		
3.29	Adequate water tanks relative to the ideal number of students: (10 liters per student)		
3.30	Number of drinking water taps is sufficient for the proportion of students: (a faucet for every 50 pupils)		
3.31	Number of toilets sufficient relative to the number of students: ideal (one toilet per 25 students)		
3.32	Soap and hand sanitizers are available		
D	**Dealing with waste**		
3.33	Present regular waste containers (regular container with cover)		
3.34	Containers are regular and adequate in number		
3.35	Collects waste in right method		
3.36	Waste is collected regularly daily		
3.37	Trash cans opened through the foot are available		
E	**Insect and rodent control**		
3.38	The school is sprayed with pesticides by health teams.		
3.39	Rodents are combated by health teams		
F	**Service workers**		
3.40	There are enough service workers (one worker per 100 students)		
3.41	There's a medical check-up card for service workers.		
3.42	Service workers wear face mask inside the school		
3.43	There's a health education card for service workers.		
G	**Medical supplies and safety requirements**		

3.44	First aid box is present.		
3.45	First aid box supplies available		
3.46	Having a sight check plate		
3.47	Fire extinguishers are present.		
3.48	Fire extinguishers are present and valid		
3.49	Wires and power points are regular.		
H	**Canteen**		
3.50	The canteen is available.		
3.51	The canteen is available and meets the health conditions (building)		
3.52	The canteen is committed to healthy food.		
3.53	There is a medical examination card for workers in the canteen		
3.54	Wearing face mask and rubber gloves for the workers in the canteen		
3.55	There is a health education certificate for workers in the canteen		

B1

Evaluation of Quality Assurance for School Health Services in Primary Health Care Centers at Al-Numaniyah District.

Questionnaire (B): Health and Nursing Staff / School Health Unit

Part 1. Demographic Characteristics

1.1. Sex: **male** ☐ **female** ☐

1.2. Age:

- 20 29- year old ☐
- 30- 39 years old ☐
- 40- 49 years old ☐
- 50- 59 years old ☐
- 60 years or more ☐

1.3. Educational level:

- Nursing school ☐
- Preparatory of nursing ☐
- diploma ☐
- Bachelor ☐
- Master or more ☐

1.4. Years of experience in school health unit ☐ **years**

Part 2. Training and Development

Participated in the training sessions

Yes ☐ No ☐

Part 3. Activity and Duties for Nursing Staff

List	Items	Never	Sometime	Always
3.1	Measuring student weight			
3.2	Measuring student height			
3.3	Optometry			
3.4	Vaccines given periodically			
3.5	Documenting all events, medical examinations and school visit reports in special records			
3.6	Participation in seminars and meetings which concerning to school health services			
3.7	Health education for students			
3.8	Environment Assessment			
3.9	Coordination with school management to name a health coordinator and assign him responsibility for monitoring all health activities in the school.			
3.10	Follow-up of students who drop out of school health care			
3.11	School Canteen Follow-up			

B1

Evaluation of Quality Assurance for School Health Services in Primary Health Care Centers at Al-Numaniyah District.

Questionnaire (C): school principals' satisfaction of School Health Services

Dear teacher

I am pleased to put this questionnaire in your hands to know your opinion about the level of school health services provided to students..... Note that this questionnaire is subject to complete confidentiality and therefore you can give your opinion in full freedom..... With appreciation.

(The form Answered by the principal or assistant of school)

Part 1. Demographic Characteristics

1.1. Sex: male ☐ female ☐

1.2. Age: ☐ year

1.3. Education achievement:

a. Preparatory academy ☐

b. Teacher institute ☐

c. Bachelor ☐

d. Higher Diploma ☐

e. Master and above ☐

Part 2. Health Education:

Have you participated in an educational lecture on school health?

Yes ☐ No ☐

Part 3. Satisfaction and acceptance of school principals for school health services

List	Items	Never	Sometime	Always
3.1	School health teams are cooperative			
3.2	Provide Vaccines			
3.3	Optometry			
3.4	Provide Medical glasses			
3.5	Hearing Examination			
3.6	Provide hearing devices			
3.7	Don't needs to visit another clinic for treatment your health problem			
3.8	School environment screening and determine appropriate solutions			
3.9	Checking school canteen			
3.10	School canteen with healthy conditions			

APPENDIX B2

Questionnaires (Arabic version)

وزارة التعليم العالي والبحث العلمي

جامعة بابل – كلية التمريض

اخي مدير مركز الرعاية الصحية المحترم أو الرديف له

تحية عطرة ....

الاستمارة التي بين يديك هي بحث لطالب الدراسات العليا دكتوراه /كلية التمريض في جامعة بابل تحت عنوان **" تقويم ضمان جودة خدمات الصحة المدرسية في مراكز الرعاية الصحية الأولية في قضاء النعمانية"** يرجى منكم التفضل بالإجابة عن كل فقراتها بدقة وبصراحة شاكرين تعاونكم. علما بان المعلومات ستعامل بسرية وتستعمل لأغراض البحث العلمي فقط ولا داعي لذكر الاسم.

مع الشكر والتقدير ...

الباحث

طالب الدراسات العليا / دكتوراه

غسان عبد الأمير واشي

تقويم ضمان جودة خدمات الصحة المدرسية في مراكز الرعاية الصحية الأولية

في قضاء النعمانية

استبانة (A1) الهيكلية ونظام المؤسسة (المراكز الصحية)

(يجيب على الاستبانة مدير مركز الرعاية الصحية أو الرديف له)

رقم الاستبانة ☐

قطاع الرعاية الصحية الأولية -------

مركز الرعاية الصحية الأولية -------

هيكلية المركز الصحي وتوفر المستلزمات والموارد ومصادرها.

1-1 هل المركز الصحي بعيد عن اقرب مستشفى

نعم ☐ لا ☐

2-1 هل خدمات المركز الصحي في مجال الصحة المدرسية كافية لتغطية الكثافة سكانية

نعم ☐ لا ☐

3-1 . البناية مصممة أصلا كمركز صحي

نعم ☐ لا ☐

4-1 . عدد الغرف في المركز الصحي كافية

نعم ☐ لا ☐

5-1 . توجد غرفة خاصة لوحدة الصحة المدرسية

نعم ☐ لا ☐

6-1 . توجد قاعة محاضرات في المركز الصحي

نعم ☐ لا ☐

7-1 . وجود حاسوب لغرض توثيق سجلات المستفيدين من رعاية الصحة المدرسية

نعم ☐ لا ☐

8-1 . وجود مستلزمات لفحص النظر في وحدة الصحة المدرسية

نعم ☐ لا ☐

9-1 . تتوفر في المركز الصحي سيارة إسعاف

نعم ☐ لا ☐

10-1 . توجد اداة لقياس الطول في وحدة الصحة المدرسية

نعم ☐ لا ☐

11-1 . يوجد مقياس للوزن في وحدة الصحة المدرسية

نعم ☐ لا ☐

12-1 . تتوفر الادوية بشكل دائم في المركز الصحي حسب قائمة الادوية الاساسية

نعم ☐ لا ☐

13-1 . تتوفر اللقاحات بشكل دائم في المركز الصحي

نعم ☐ لا ☐

14-1 . تتوفر المستلزمات الطبية والمختبرية بشكل دائم في المركز الصحي

نعم ☐ لا ☐

15-1 . وجود وسائل تصريف النفايات الطبية (محرقة او حاوية)

نعم ☐ لا ☐

استبانة (A2) الهيكلية ونظام المؤسسة (المدارس الابتدائية)

استاذي الفاضل :

يسرني ان اضع هذا الاستبيان بين يديك لتعرف على هيكلية المدرسة الابتدائية ..... علما ان هذا الاستبيان يخضع لسرية تامة وبالتالي يمكنك الأدلاء برائيك بكامل حريتك ولأداعي لذكر الاسم .....مع التقدير

(يجيب على الاستبانة مدير المدرسة او معاون ويتم التقييم بالملاحظة من قبل الباحث)

رقم الاستبانة

اسم المركز الصحي المسؤول عن تقديم الخدمات للمدرسة ----------

A	الهيكل الإنشائي للمدرسة	نعم	كلا
3.1	المدرسة بعيدة عن ورش وساحات بيع الغاز ومحطات تعبئة الوقود.		
3.2	المدرسة بعيدة عن المولدات والاسلاك الكهربائية وابراج الهواتف النقالة		
3.3	المدرسة بعيدة عن تجمعات مياه اسنه		
3.4	المدرسة بعيدة عن أي مصدر للضوضاء		
3.5	مساحة المدرسة تتناسب مع عدد التلاميذ (المثالي 10- 15 م2) لكل تلميذ		
3.6	سور المدرسة موجود		
3.7	ارتفاع سور المدرسة 1.8 ، 2 م		
3.8	ساحة المدرسة موجودة		
3.9	ساحة المدرسة موجودة ونظامية		
3.10	يتم تصريف مياه الأمطار من الساحات بصورة نظامية (مربوطة بشبكة مجاري)		
3.11	حديقة المدرسة موجودة		
3.12	حديقة المدرسة مدامه		
3.13	عدم وجود تصدعات أو هدم في بناية المدرسة (الصفوف + سطح المدرسة)		
B	**الصفوف الدراسية والقاعات**		
3.14	ابعاد الصفوف مثالية (6م عرض، ٨ م طول، 4م ارتفاع)		
3.15	مساحة الصفوف كافية لطلاب: (المثالي 1 -1.5 م لكل طالب)		
3.16	التهوية الطبيعية للصفوف كافية (مساحة الشبابيك 1/6 - 4/1 مساحة قاعة الدرس)		
3.17	التهوية الاصطناعية للصفوف موجودة وكافية		
3.18	الانارة الطبيعية للصفوف كافية		
3.19	الإنارة الاصطناعية للصفوف موجودة وكافية		
3.20	تتوفر معقمات الايدي داخل الصف		
3.21	المقاعد الدراسية والكراسي تتناسب أعدادها مع اعداد الطلبة وتكون رحلة واحدة لكل طالب		
3.22	المسافة بين مقعد وأخر لا تقل عن متر		
3.23	المقاعد الدراسية والكراسي مناسبة للتكوين البدني والجسمي للتلميذ وحسب المرحلة		
3.24	بعد السبورة عن الصف الامامي للطلبة نظامي (1.5 – 2 م) على الأقل		

3.25	زجاج النوافذ صالح (غير مكسر)		
C	**المياه والمرافق الصحية**		
3.26	تتوفر مياه اساله		
3.27	خزانات المياه موجودة		
3.28	خزانات المياه موجودة وصالحة		
3.29	خزانات المياه كافية نسبة الى عدد التلاميذ المثالي: (10 لتر لكل طالب)		
3.30	عدد حنفيات مياه الشرب كافية نسبة لعدد التلاميذ: (العدد الكافي - حنفية لكل 50 تلميذ)		
3.31	عدد المرافق الصحية كافية نسبة الى عدد الطلاب: المثالي (مرفق صحي لكل 25 طالب)		
3.32	الصابون ومعقمات الايدي متوفرة		
D	**التعامل مع النفايات**		
3.33	وجود حاويات نظامية للنفايات (الحاوية النظامية ذات غطاء)		
3.34	الحاويات نظامية وكافية العدد		
3.35	تجمع النفايات بصورة صحيحة		
3.36	يتم رفع النفايات بصورة منتظمة يوميا		
3.37	سلات مهملات تفتح عن طريق القدم متوفرة		
E	**مكافحة الحشرات والقوارض**		
3.38	يتم رش المدرسة بالمبيدات من قبل الفرق الصحية.		
3.39	يتم مكافحة القوارض من قبل الفرق الصحية		
F	**عمال الخدمة**		
3.40	يوجد عمال خدمة بعدد كافي (عامل لكل 100 طالب)		
3.41	يوجد بطاقة الفحص الطبي لعمال الخدمة		
3.42	يرتدي عمال الخدمة الكمامات داخل المدرسة		
3.43	يوجد بطاقة التثقيف الصحي لعمال الخدمة		
G	**المستلزمات الطبية وشروط السلامة**		
3.44	صندوق اسعافات الاولية موجود		
3.45	مستلزمات صندوق الاسعافات متوفرة		
3.46	وجود لوحة فحص البصر		
3.47	مطافئ الحريق موجودة		
3.48	مطافئ الحريق موجودة وصالحة (نفاذية المفعول)		
3.49	الاسلاك ونقاط الكهرباء نظامية		
H	**الحانوت المدرسي**		
3.50	يوجد حانوت مدرسي		
3.51	الحانوت المدرسي موجود ومستوفي للشروط الصحية (البناية)		
3.52	الحانوت المدرسي ملتزم بالمواد الغذائية الصحية السليمة		
3.53	توجد بطاقة الفحص الطبي للعاملين في الحانوت (نافذة)		
3.54	ارتداء الكمامات والقفازات المطاطية للعاملين في الحانوت		
3.55	توجد شهادة التربية الصحية للعاملين في الحانوت (نافذة)		

B2

وزارة التعليم العالي والبحث العلمي

جامعة بابل – كلية التمريض

زميلتي الممرضة ..... زميلي الممرض

تحية طيبة ....

الاستمارة التي بين يديك هي بحث لطالب الدراسات العليا دكتوراه /كلية التمريض في جامعة بابل تحت عنوان **" تقويم ضمان جودة خدمات الصحة المدرسية في مراكز الرعاية الصحية الأولية في قضاء النعمانية"** يرجى منكم التفضل بالإجابة على كل فقراتها بدقة وبصراحة شاكرين تعاونكم. علما بان المعلومات ستعامل بسرية وتستعمل لأغراض البحث العلمي فقط ولا داعي لذكر الاسم.

مع الشكر والتقدير ...

الباحث

طالب الدراسات العليا / دكتوراه

غسان عبد الأمير واشي

B2

تقويم ضمان جودة خدمات الصحة المدرسية في مراكز الرعاية الصحية الأولية في قضاء النعمانية

استبانة(B) الملاك الصحي والتمريضي/ وحدة الصحة المدرسية

رقم الاستبانة ☐

قطاع الرعاية الصحية الأولية --------

مركز الرعاية الصحية الأولية --------

المحور الأول : المعلومات الشخصية:

1-1. الجنس: ذكر ☐ أنثى ☐

2-1. العمر:

- 20 -29 سنه ☐
- 30- 39 سنه ☐
- 40- 49 سنه ☐
- 50- 59 سنه ☐
- 60- فأكثر ☐

3-1 .التحصيل العلمي :

- مدرسة تمريض ☐
- اعدادية تمريض ☐
- دبلوم ☐
- بكالوريوس ☐
- ماجستير او اعلى ☐

5-1. عدد سنوات الخبرة في مجال وحدة الصحة المدرسية ☐ سنة

المحور الثاني : التدريب والتطوير :

1.2.هل شاركت في دورات تدريبية في مجال الصحة المدرسية ؟

نعم ☐ كلا ☐

المحور الثالث: الواجبات والنشاطات للملاك الصحي و التمريضي :

ت	الواجبات والنشاطات	دائما	أحيانا	ابدا
1-3	قياس وزن الطلبة.			
2-3	قياس طول الطلبة.			
3-3	القيام بفحص النظر للطلبة.			
4-3	إعطاء اللقاحات بشكل دوري.			
5-3	توثيق كافة الفعاليات والفحوصات الطبية وتقارير الزيارة المدرسية في سجلات خاصة.			
6-3	المشاركة في الندوات واللقاءات الخاصة برعاية الصحة المدرسية في المركز الصحي.			
7-3	تقديم برامج تثقيفية صحية للطلبة.			
8-3	حث مدراء المدارس على توفير بيئة صحية للمدرسة.			
9-3	التنسيق مع ادارات المدارس لتسمية ملاك تربوي (المنسق الصحي) وتكليفه مسؤولية متابعة كافة النشاطات الصحية في المدرسة.			
10-3	متابعة الطلبة المتسربين من الرعاية الصحية المدرسية.			
11-3	متابعة الحوانيت المدرسية (نوعية الاغذية، مدى صلاحيتها والنفاد، بطاقة الفحص الطبي وبطاقة التثقيف الصحي للعاملين).			

B2

وزارة التعليم العالي والبحث العلمي

جامعة بابل – كلية التمريض

عزيزي المعلم ..... عزيزتي المعلمة

تحية طيبة ....

الاستمارة التي بين يديك هي بحث لطالب الدراسات العليا دكتوراه /كلية التمريض في جامعة بابل تحت عنوان **" تقويم ضمان جودة خدمات الصحة المدرسية في مراكز الرعاية الصحية الأولية في قضاء النعمانية"** يرجى منكم التفضل بالإجابة على كل فقراتها بدقة وبصراحة شاكرين تعاونكم. علما بان المعلومات ستعامل بسرية وتستعمل لأغراض البحث العلمي فقط ولا داعي لذكر الاسم.

مع الشكر والتقدير ...

الباحث

طالب الدراسات العليا / دكتوراه

غسان عبد الأمير واشي

B2

تقويم ضمان جودة خدمات الصحة المدرسية في مراكز الرعاية الصحية الأولية في قضاء النعمانية

استبانة (C) رضا المستفيدين من خدمات الصحية المدرسية (إدارة المدارس)

استاذي الفاضل:

يسرني ان اضع هذا الاستبيان بين يديك لتعرف على رائيك بمستوى خدمات الصحة المدرسية المقدمة الى الطلبة ..... علما ان هذا الاستبيان يخضع لسرية تامة وبالتالي يمكنك الأدلاء برائيك بكامل حريتك ولأداعي لذكر الاسم .....مع التقدير

(يجيب على هذه الاستمارة مديرة المدرسة او المعاون)

رقم الاستبانة ☐

اسم المركز الصحي المسؤول عن تقديم الخدمات للمدرسة ----------

المحور الأول: المعلومات الشخصية:

1-1 .الجنس: ذكر ☐ أنثى ☐

1-2 **.العمر**: ☐ سنة

3-1 .التحصيل الدراسي:

a. اعدادية اكاديمية ☐

b. دبلوم بعد الاعدادية ☐

c. بكالوريوس ☐

d. دبلوم عالي ☐

e. ماجستير او اعلى ☐

المحور الثاني : التوعية (التثقيف الصحي)

1.2. هل شاركت في محاضرة تثقيفية في مجال الصحة المدرسية؟

نعم ☐ **كلا** ☐

المحور الثالث : رضا وقبول مدراء المدارس عن خدمات الصحة المدرسية .

ت	الفقرات	دائما	أحيانا	ابدا
1-3	الفريق الصحي المكون من الملاكات طبية وصحية متعاون معكم .			
2-3	تقوم الملاكات الصحية والتمريضية (ممرض او معاون طبي) بزيارة المدرسة وإعطاء اللقاحات للطلبة.			
3-3	تقوم الملاكات الصحية والتمريضية بزيارة المدرسة والقيام بفحص النظر للطلبة.			
4-3	تصرف النظارات الطبية من قبل المركز الصحي للطلبة الذين لديهم ضعف في البصر.			
5-3	تقوم الملاكات الطبية (الطبيب) بزيارة المدرسة والقيام بفحص السمع للطلبة.			
6-3	تصرف اجهزة لتقوية السمع من قبل المراكز الصحية للطلبة الذين لديهم ضعف في السمع .			
7-3	يحتاج التلميذ الى مراجعة الطبيب في العيادة الخاصة رغم اجراء الفحص وتقيم حالته الصحية في المدرسة.			
8-3	تقوم الملاكات الصحية والتمريضية بتقويم بيئة المدرسة وتحديد التوصيات والحلول المناسبة لها.			
9-3	يقوم فريق وحدة الصحة المدرسية بتدقيق وتقويم المواد الموجودة بالحانوت المدرسي بشكل دوري .			
10-3	الاطعمة الموجودة بالحانوت المدرسي غير مكشوفة ونظيفة وتعتقد انها ضمن الشروط الصحية .			

APPENDIX -C 1-

List of Experts

ت	اسم الخبير	اللقب العلمي	الاختصاص	مكان العمل	سنوات الخدمة
1	د. امين عجيل ياسر	استاذ	تمريض صحة الاسرة والمجتمع	جامعة بابل / كلية التمريض	38
2	د. منى عبد الوهاب خليل	أستاذ متمرس	تمريض صحة الاسرة والمجتمع	جامعة المستقبل / كلية التمريض	43
3	د. كافي محمد الاسدي	استاذ	تمريض صحة الاسرة والمجتمع	كلية الطوسي الجامعة / قسم التمريض	40
4	د. سلمى كاظم جهاد	استاذ	تمريض صحة الاسرة والمجتمع	جامعة بابل / كلية التمريض	35
5	د. سعدية هادي حميدي	استاد	تمريض صحة الام والوليد	كلية المستقبل الجامعة /قسم التمريض	42
6	د. فاطمة وناس خضير	استاذ	تمريض صحة الاسرة والمجتمع	جامعة الكوفة / كلية التمريض	29
7	د. سلمان حسين فارس	أستاذ مساعد	تمريض صحة الاسرة والمجتمع	جامعة كربلاء / كلية التمريض	30
8	د. لجين أنور عبود الخزرجي	أستاذ مساعد	طب صحة الاسرة والمجتمع	جامعة بغداد / كلية طب الكندي	30
9	د. منصور عبد الله فلاح	أستاذ مساعد	تمريض صحة الاسرة والمجتمع	جامعة الكوفة / كلية التمريض	15
10	د. قيس إسماعيل عجام	أستاذ مساعد	طب صحة الاسرة والمجتمع	جامعة بابل / كلية الطب	14
11	د. حيدر حمزة علي	أستاذ مساعد	تمريض الصحة النفسية والعقلية	جامعة الكوفة / كلية التمريض	13
12	د. عقيل عباس نعمان	أستاذ مساعد	تمريض صحة الاسرة والمجتمع	المعهد التقني الطبي / بعقوبة	16
13	د. علاء محيبس طعمة	أستاذ مساعد	تمريض صحة الاسرة والمجتمع	جامعة ذي قار / كلية التمريض	18

14	د. عبد الكريم سلمان خضير	أستاذ مساعد	تمريض صحة الاسرة والمجتمع	جامعة البصرة / كلية التمريض	14
15	د. نادية عبد الرزاق جمال	أستاذ مساعد	تمريض صحة الاسرة والمجتمع	الجامعة التقنية الشمالية/ المعهد التقني موصل	10
16	د. رضا محمد لفتة	أستاذ مساعد	تمريض صحة الاسرة والمجتمع	جامعة العميد / كلية التمريض	6

قائمة أسماء المدارس الابتدائية في قضاء النعمانية

ت	اسم المدرسة	ت	اسم المدرسة	ت	اسم المدرسة
.1	جرير	.26	سيد الشهداء	.51	ال ياسين
.2	الديمه	.27	انوار الرافدين	.52	زينب الكبرى
.3	الاعتماد	.28	احباب الحسين (ع)	.53	كنوز الحكمة
.4	الفتوه	.29	الجزائر	.54	الحسينية
.5	ضفاف دجلة	.30	صلاح الدين	.55	الفاطميات
.6	السدير	.31	الاقدام	.56	الاحرار
.7	التيسير	.32	المعري	.57	محسن خنفاس
.8	الفارابي	.33	الجزيرة	.58	عذاب مطرود
.9	الإخلاص	.34	عز الدين القسام	.59	مالك عريبي
.10	سومر	.35	المسرات	.60	الانتفاظة
.11	الجماهير	.36	الهمام	.61	المكارم
.12	الاداب	.37	البركات	.62	اليمن
.13	النخيل	.38	الإرادة	.63	شمش المحبة
.14	المتنبي	.39	تدمر	.64	أبو شجير
.15	بلقيس	.40	المرتضئ	.65	الطموح
.16	الطفوف	.41	الصدرين	.66	البيادر
.17	الاثمار	.42	الاستقامة	.67	الرسل
.18	الفيحاء	.43	الخيرات	.68	النبأ
.19	جبل التفوق	.44	الحسين	.69	الانسجام
.20	الشهيد سليم خزعل	.45	النعمانية	.70	الكنعانية
.21	النعمان ابن المنذر	.46	جوهرة العراق	.71	الميقات
.22	نور الكريم	.47	العقبة	.72	الحضارة
.23	موكب العطاء	.48	الشهيد نعمة عامر	.73	رحاب الصالحات
.24	الشهيد نعيم سلمان	.49	إبراهيم الخليل	.74	الغد السعيد
.25	قمر بني هاشم	.50	الفراهيدي	.75	الزاملية

76.	عطاء الكوثر	101.	التفاؤل	126.	السلسبيل
77.	احباب الزهراء	102.	زينب الكبرى	127.	الرحمة
78.	الغصون	103.	المؤمن	128.	القدس
79.	الزوراء	104.	الاريج	129.	ليلى بنت مسعود
80.	المقاصد	105.	قريش	130.	ام البنين
81.	عز الدين	106.	البصائر	131.	زهور المستقبل
82.	العرفان	107.	الابتهال	132.	سيد مالك الياسري
83.	قاسم شبر	108.	مجيد الزويني	133.	الاعتماد
84.	الرونق	109.	الزينبيات		
85.	الاشتراكي	110.	الانشراح		
86.	هاشم الحكيم	111.	القديسة		
87.	موكب الإباء	112.	ماجد محمد امين		
88.	حنين	113.	رحيم سلمان		
89.	الطيب	114.	نوافذ الخير		
90.	البيان	115.	المنذر		
91.	ابن زيدون	116.	احمد حسن الحجامي		
92.	اوراس	117.	طيور الجنة		
93.	احمد اعلان	118.	الاستبرق		
94.	الرند	119.	محمد ناجي النعماني		
95.	الثبات	120.	زمزم		
96.	الحجام	121.	مثنى قاسم الكلابي		
97.	الاشراق	122.	زينب علي ياسين		
98.	شهداء الكلابيين	123.	المجد		
99.	الرسول الأعظم	124.	كاظم سعيد		
100	احمد حبيب	125.	الادريسي		

المستخلص

تعتبر الصحة المدرسية أحد العناصر المهمة في الرعاية الصحية الأولية لأنها تتعامل مع شريحة كبيرة ومهمة من المجتمع، حيث يشكل الطلاب ما يقرب ثلث سكان المجتمع.

تهدف الدراسة إلى تقويم ضمان جودة خدمات الصحة المدرسية. وكذلك لتحديد رضا مديري المدارس عن مراكز الرعاية الصحية الأولية تجاه خدمات الصحة المدرسية.

دراسة وصفية باستخدام منهج التقييم تتكون من (304) مشاركاً تم اختيارهم بواسطة عينة مناسبة من خلال استخدام منهج العينات غير الاحتمالية موزعين على (6) مراكز للرعاية الصحية الأولية الرئيسية، (133) مدرسة ابتدائية، (32) مقدمي الرعاية الصحية و (133) المستهلكين كمديري مدارس في منطقة النعمانية من 5 تموز 2022 إلى 25 نيسان 2023. تم تطوير وبناء الاستبيان بعد مراجعة دقيقة للأدبيات، وهو يتألف من أربعة نماذج استبيانات، وتم جمع البيانات عن طريق الاستبيان ومن خلال تقنية المقابلة وملاحظة الباحث . يتم إجراء المقابلات مع مديري مراكز الرعاية الصحية الأولية الرئيسية ومقدمي الرعاية الصحية ومديري المدارس. وتم تحليل البيانات باستخدام التحليل الإحصائي الوصفي والاستدلالي في برنامج (SPSS) الإصدار 23.

أظهرت الدراسة أن تقويم ضمان الجودة المتعلق بمعايير الهيكل التنظيمي لكل مركز من مراكز الرعاية الصحية الأولية ومدرسة ابتدائية (66.7%)، (78.9%) على التوالي. وفيما يتعلق بمعايير العملية، فقد أظهر (50.0%) من مقدمي الرعاية الصحية أن نشاطهم وواجباتهم عادلة كما وصفها المتوسط المتوسط، في حين أظهرت النتائج (64.7%) من مديري المدارس أبدوا رضا إلى حد ما تجاه خدمات الرعاية الصحية في المدارس الابتدائية.

وخلصت الدراسة إلى أن تقويم ضمان الجودة المتعلق بمراكز الرعاية الصحية الأولية والمدارس الابتدائية، ونشاط وواجبات الرعاية الصحية، ورضا مديري المدارس كان عادلاً كما هو موصوف بالمتوسط المتوسط في مراكز الرعاية الصحية الأولية فيما يتعلق بخدمات الصحة المدرسية. كان هناك ارتباط إيجابي كبير بين نتائج ضمان جودة خدمات الصحة المدرسية فيما يتعلق بهيكل مراكز الرعاية الصحية الأولية.

وأوصت الدراسة بإجراء مراقبة دورية للبيئة المدرسية من قبل موظفي وحدة الصحة المدرسية في مراكز الرعاية الصحية الأولية والتركيز على المجال التالي: مكافحة الحشرات والقوارض، عمال النظافة، المستلزمات الطبية واشتراطات السلامة والمقصف. تفعيل العلاقة بين وحدة الصحة المدرسية وإدارات المدارس لتحقيق أفضل خدمات الصحة المدرسية.

جمهورية العراق
وزارة التعليم العالي والبحث العلمي
جـــامعـــــــة بـــــابـل
كـــليـــــــــة التمـــــريض

تقويم ضمان جودة خدمات الصحة المدرسية في مراكز الرعاية الصحية الأولية في قضاء النعمانية

اطروحة مقـــدمة من قبل

غسان عبد الأمير واشي

الى مجلس كليــة التمريض/ جامعـة بابل كجزء من متطلبات نيل درجة الدكتوراه فلسفة في علوم التمريـض

بأشـــراف

الأستاذ الدكتور. ناجـي ياسـر سعـدون

رمضان 1444 هـ

نيسان 2023