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SCHOOL HEALTH GUIDE

for Medical and Health Cadres Working
at primary health care centers in Iraq

DISCLAIMER

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CHAPTER ONE

Introduction

In light of the importance of school health programs and services and the participation of numerous units and programs within the health center in offering them, also in order to offer quality programs and services based on service standard specifications, this guide was set up to assist the medical and health cadres at the primary health care centers along with the required coordination with the other health establishments for the completion of the services.

The Category Targeted by the Guide

The medical and health cadres involved in offering school health services at health centers.

The Importance of Guide Implementation

The school health guide implementation contributes to offering smooth and cohesive quality health services and programs to the individuals of the school community according to scientific bases and it provides an opportunity for the medical and health cadres to offer distinguished services through the spirit of one team.

Guide Subjects

- School health concept
- School health structure
- Basic examinations of students
Examination of the students registered in Kindergarten and Grade One Elementary
Examination of college and institute applicants
- Immunization of students
- Control of communicative diseases in educational establishments
- Health monitoring in educational establishments and institutes for the handicapped
- Healthy food and the evaluation of the food conditions of students
- Control of non-communicative diseases in educational establishments
- Psychological health of school
- **Mouth and teeth health**
- Health coordinator

Guide Preparation

This guide was prepared by a working committee of a group of experts involved in school health programs and services at the divisions of the Public Health Departments, the Technical Affairs Department, the Planning and Resource Development Department and the concerned at the Ministry of Education, the Ministry of Higher Education and Scientific Research and the Ministry of Labor and Social Affairs through workshops over several months during 2013 and in collaboration with and with the support of the Health Care Project in Iraq / the United States Agency for International Development (USAID).

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CHAPTER TWO

School Health Concept

School Health

School health services are primary care services for individuals enrolled in Kindergarten until their graduation from the university. Based on this principle, those services are deemed significant and basic as they cover a large segment of society and require resources and the effective participation of the

community. Based on the aforementioned, those services are deemed the cornerstone of the implementation of primary health care for the following reasons:

- 1- They cater to a large segment of society. It is common knowledge that approximately 51% of the population falls in the age bracket below 15 years. As previously clarified, school health services deal with the age bracket from 4 years to the university graduation age and even to those among them who are enrolled in higher studies (i.e. they are liable for a time period exceeding 20 years), and consequently almost 1/3 (one third) of the population is offered school health services.
- 2- School health services have a great impact on changing the misconceptions on health matters by giving clear and practical health messages to students through the use of school health education.
- 3- Schools are deemed among the places that help to spread communicable diseases. Hence, school health services aim to minimize the spread of these diseases.
- 4- Screening the cases suffering from congenital defects, through periodic examinations in schools.
- 5- Screening the cases suffering from specific diseases and early detection of the children prone to risk such as the ones suffering from partial or full deafness, refractive diseases, slow learning ... etc.

School Health Objectives

1. To examine the students enrolled in Kindergarten, Grade One, Grade Seven and Grade Twelve and the students in the institutes for the handicapped, nursing homes, nursing schools and religious schools with the aim of early detection of medical conditions and their treatment.
2. To minimize the spread of all communicative diseases in schools.
3. To diagnose all the environmental deficiencies and to follow up their remedial by the concerned authorities.
4. Health and environmental awareness for all students, academic cadres and staff in schools.

School Health and Primary Health Care

School health is deemed among the important elements of primary health care as it deals with a large and significant segment of society of which the students constitute (1/3) one third. Regardless of their limitation due to the available capabilities, school health services continue however to deal with a main or basic part of society. The early detection of medical conditions and their treatment, also dealing in an instrumental and efficient manner with the medical cases on a daily basis through the primary health care centers that are spread in all the governorates of Iraq within the daily therapeutic services offered to students, constitute a main focus that lends to primary health care the support required for offering facilitated, acceptable and scientifically sound services in basic simple techniques at a low cost. We perceive, in this chapter, to summarize the relationship between school health and primary health care in the following table in order to clarify this deep and significant relation in a brief, scientific and practical method:

School Health Services	Their Relationship to the Principles of Primary Health Care and Their Role in Activating Those Principles in Order to Guarantee Their Quality
1- Early detection and treatment of medical conditions among students through primary health care	<ul style="list-style-type: none"> * To reach a large segment of society * To offer preventive and therapeutic services to a large segment and sensitive age brackets in society * To use simple, scientific and practical techniques * To coordinate with the educational sector in order to offer the required service * To enlighten the parents of students through parent teacher associations in order to guarantee the participation of the

	<p>community in offering the required services</p> <ul style="list-style-type: none"> * To enlighten the students as to the importance of early detection and the treatment of medical conditions in order to guarantee obtaining the required interaction between the service provider and the beneficiary, thus guaranteeing the quality of services rendered
<p>2- To diagnose the school environmental deficiencies and to follow up undertaking the necessary remedial actions by the educational sector</p>	<ul style="list-style-type: none"> * To diagnose the deficiencies according to scientific and practical bases in line with standards * To link the early diagnosis of environmental deficiencies and their remedial to the prevention of various diseases and the development of the required environment for education by linking the educational process to the health process * To coordinate between the health sector, the education sector and the supporting authorities in order to follow up the environmental deficiencies in schools, this within the coordination and collaboration among all the sectors of society as a basic pillar for primary health care * Awareness as to the importance of environmental matters and their relationship with the occurrence of the disease while guaranteeing the quality of education to parents of students and to students themselves within the parent teacher associations, also through health awareness of students and through health education with a scientific return. * To train the academic supervisors and the school administrations in general on the importance of remedying and following up the school environmental sanitation by granting it the required priority. * The follow-up by the academic supervisor of matters in school and the classroom and their consideration among the priorities for the success of the educational process
<p>3- To minimize the spread of communicative diseases in schools</p>	<ul style="list-style-type: none"> * To coordinate between the health sector and the education sector with respect to the early detection of communicative diseases through the training of academic cadres, also the efficient epidemiological screening inclusive of the eradication of the source of the contagion by granting the afflicted student a compulsory leave * To enlighten the parents of students about the importance of early detection of the communicative disease by training the academic cadres, also the efficient epidemiological screening inclusive of the eradication of the source of the contagion by granting the afflicted student a compulsory leave * To stress the importance of student participation in minimizing the spread of communicative diseases by educating him about the importance of observing the compulsory leave, the early detection of the disease and conducting the epidemiological screenings at school and at home through the implementation of health education subjects in academic curricula and through school health education with a scientific return. * The participation of all the supporting community sectors in the resolution of health and environmental problems in the

	region through the coordination with the health sector and through the primary health care councils and parent teacher associations
4- Regulated teeth care	<ul style="list-style-type: none"> * School health education with respect to the prevention of cavities and gum and teeth diseases in order to guarantee the participation of academic supervisors, school administrations and academic cadres in enhancing the implementation of mouth and teeth health * The participation of students in the awareness of prevention of mouth and teeth health within school health education with a practical return * To include the fundamentals of prevention of teeth cavities within the academic curricula * Early detection of medical conditions and their treatment along with individual and group health awareness of mouth and teeth disease prevention * To guarantee the participation of all society sectors in the awareness with regard to prevention of teeth cavities in all age brackets in general and in children in particular and the investment in the primary health care councils for this purpose
5- To invest in the academic supervisors as primary health care leaders	<ul style="list-style-type: none"> * To accompany the academic supervisor of the school health team at least once during his visit to any school falling within the supervised region during the academic year in order to acquaint him in a scientific practical manner with school health activities * Health and environmental awareness by the academic supervisors as to school health services and their significance for the school administrations and academic cadres of schools falling within the region under their supervision * The academic supervisors, whilst visiting the schools falling within their supervisory region with the aim of educational supervision, shall invest their efforts for the purpose of school health and primary health care education with a scientific return so as to accommodate the topics tackled with the health and environmental problems of which school and society are suffering * To link the educational process to the health process by training the academic supervisors so that they oversee health and environmental matters in school during their academic supervision, thus enhancing school health services * To conduct joint field studies between the educational sector and the health sector for the purpose of detecting the significance of educational and health problems in the areas and the extent of the impact of one on the other, also the differences between those problems from one area to another, the impacting demographic factors and the differing epidemiological standing in the areas based on those factors by investing the efforts and capabilities of the academic supervisors, school administrations and academic cadres through the coordination with the medical and health cadres

	<p>in the area. This shall enhance the work of primary health care approach in participating with the sectors of society, not merely in services, but also in examining the gravity of health and environmental problems. It shall also enhance the approach of guaranteeing the participation of society in finding field remedies.</p>
6- Early detection of handicaps	<ul style="list-style-type: none"> * Instrumental and effective early detection upon examination of new students prior to their enrollment * Detection of poor eyesight and hearing, congenital defects and remaining physical, psychological, visual or auditory handicap during school health team visits in the event they are not detected during the initial examination of new students or subsequently * The inclusion of the students of the institutes for the handicapped and the nursing social homes in school health services in order to achieve integrity and inclusion in offering those services whereby the student continues to obtain them, even in the event he does not suffer from a handicap, this within an ongoing organized coordination between the health and education sectors and the Ministry of Labor and Social Affairs * To train the academic supervisors, school administrations and academic cadres on the importance of early detection of handicap cases and how to coordinate with the health authorities * Health education within the parent teacher associations in order to guarantee the participation of the parents of students in the early detection of handicap cases * Health education and school health awareness with a practical return in order to guarantee the participation of the parents of students in the early detection of handicap cases among their classmates and siblings, this in addition to dealing properly with the handicap cases without making them feel any less than their peers, thus filling the psychological gap that limits the capabilities of the handicapped and their rehabilitation as productive members in society
7- Early detection of slow learning cases	<ul style="list-style-type: none"> * To train the academic supervisors, school administrations and academic cadres on the importance of early detection of slow learning cases and how to deal with them so as to guarantee quality treatment and the possibility of the student's return to regular classes within a standard time period * To ensure the participation of society in the early detection of slow learning cases, even prior to the student's enrollment in school, this through health awareness of all the segments of society in coordination with all the sectors of society and the parent teacher associations
8- To refer the students suffering from psychological and behavioral problems to the Social and Psychological Services	<ul style="list-style-type: none"> * To train the academic supervisors, school administrations and academic cadres on the importance of early detection of cases of psychological and behavioral disorders, their referral

Office	<p>to the Social and Psychological Services Office and following up the case through the classroom teacher in order to organize the priorities and follow-up of the questionable student, to visit him at home and for the teacher and the parent (whenever possible) to proceed to the Social and Psychological Services Office that is supervised by a psychologist and a pediatrician and meets once a week. The objective of the office is to protect the student from the occurrence of the psychological disease and to make recommendations through the joint collaboration of home and school</p> <ul style="list-style-type: none"> * To coordinate with all the sectors of society, the supporting authorities and the parent teacher associations with respect to the awareness of the importance of early detection in students and how to deal with them
9- To follow up the vaccination situation of students	<ul style="list-style-type: none"> * To enquire about the vaccination situation of new students prior to their enrollment in Kindergarten and Elementary schools and to enlighten the parents of students about the importance of completing the student vaccinations according to the vaccination schedule endorsed by the immunization expanded program * School health awareness of the importance of completing the stipulated vaccinations as per the vaccination schedule * Health awareness through parent teacher associations as to the importance of vaccines and their administration within the determined schedule, also the importance of the timely administration of boosters * Health awareness of female students as to the importance of having the tetanus toxoid vaccine in coordination with the remaining sectors of society, the supporting authorities and the parent teacher associations * School health education with a practical return so as to enlighten the students with regard to health for their families and classmates in terms of the importance of vaccines, their timely administration and the follow-up of those abstaining within the area in which they live
10- Coordination between school health services and the remaining primary health care services in order to obtain the required interaction among all them for the purpose of ensuring the quality of those services	<ul style="list-style-type: none"> * Coordination with maternity and childhood care with respect to health and nutrition follow-up of Kindergarten students * Coordination with maternity and childhood care with respect to early detection of handicaps and slow learning * Coordination with maternity and childhood care with respect to offering maternity care services and family planning to academic cadres according to the geographic area of the inhabitants * Coordination with the immunization with respect to following up the administration of vaccines to children, following up those omitted and administering vaccines to students in accordance with central plans and followed practices * Coordination with Health Monitoring with respect to

	<p>following up the health monitoring conditions in school canteen</p> <ul style="list-style-type: none"> * Coordination with Health Monitoring with respect to following up the health monitoring conditions in student boarding divisions. <p>To coordinate with the Epidemic Monitoring teams with respect to conducting the epidemic screenings of communicative diseases in schools</p>
11- Coordination between school health, the remaining sectors of society, the supporting authorities and the international organizations in order to enhance guaranteeing the participation of society in those services	<ul style="list-style-type: none"> * Instrumental and effective coordination with the educational sector * Instrumental and effective coordination with the Ministry of Higher Education and Scientific Research with respect to following up students in universities and institutes * Instrumental and effective coordination with the Ministry of Labor and Social Affairs with respect to following up the institutes for the handicapped and the social care homes * Instrumental and effective coordination with the Ministry of Awqaf and Religious Affairs with respect to following up students in religious schools * Instrumental and effective coordination with the supporting authorities (civil community establishments) * Organized and ongoing coordination with international organizations
12- Training the academic supervisors, school administrations and academic cadres	<ul style="list-style-type: none"> * Site training for those cadres * To stress training on the priorities of school health services * To stress training on granting the information, skills and practices of the role of the educational sector in the improvement and development of school health services * To stress practical training with the aim of familiarization with the status quo and how to improve and to develop it * To stress in training on how to link the health process in school health services * To stress in training on communication skills and the importance of their enhancement * Joint, regular and ongoing supervision of the trainees in order to ensure the conversion of information and acquired skills through training into behavioral practices that improve and develop the rendered services * To stress on the availability of trainee feedback in a regular and continuous manner
13- Studies, guides and surveys that enhance performance	<ul style="list-style-type: none"> * To conduct studies on health and environmental problems within school health services * To conduct studies on the impact and efficiency of school health services * To conduct studies on the impact and efficiency of eye care services in school * To conduct special studies on the participation of the community in school health services * To prepare a guide clarifying the work context and highlighting how to improve and to develop these contexts in

	<p>an organized and ongoing manner through quality planning and supervision</p> <ul style="list-style-type: none"> * To conduct studies on the implementation method of health enhancing schools within the school health activity development steps * To conduct field surveys reflecting the gravity of school health problems according to their priorities, this in addition to the new horizons of school health, such as conducting a survey of the category of youth at schools with the aim of examining the results deduced from those surveys and to reach scientific and practical recommendations that improve and develop school health services in view of their consideration as an instrumental and effective element in other primary health care services
14- To strive to render the school an academic, health and social enlightenment center	<ul style="list-style-type: none"> * The participation of academic cadres as health coordinators following up the health condition of students * The participation of academic cadres as volunteers within the local and national health campaigns * To enlighten the academic cadres in terms of health so that they participate in an instrumental and efficient manner in resolving the health and environmental problems in society * To implement the experiment of health enhancing schools, to circulate the experiment following its evaluation and to set up a sensible plan for its gradual implementation * To make the parent teacher associations participate in the resolution of health and environmental problems in schools, in addition to the educational problems in the area * To activate the role of the student by enlightening him about health and making him execute and follow up the health and environmental problems in his school and community
15- The continuance of services during the summer vacation	<ul style="list-style-type: none"> * Coordination with the educational sector in order to follow up the implementation of environmental deficiencies during the summer vacation and the preparation for the new academic year * The follow-up of the execution of training courses for academic supervisors, school administrations and academic cadres along with the follow-up of trainees in order to ensure the preparation for the new academic year * To examine the status quo of rendered services by analyzing school health services and the results of field studies and benefitting from them in order to set up an instrumental school health plan for the new academic year
16- To provide prescription eyeglasses for students suffering from eye refractive diseases, according to available potential	<ul style="list-style-type: none"> * Through workshops manufacturing prescription eyeglasses or preparing them at the expense of the health sector * Health awareness of students as to the importance of always wearing prescription eyeglasses and not to be intimidated of wearing them in the event there is a real need for them
17- Prevention of accidents in schools	<ul style="list-style-type: none"> * To follow up environmental matters in schools in coordination with the academic sector

	<ul style="list-style-type: none"> * To train the academic cadres on first aid * School health awareness as to the importance of accident prevention * School health education with a practical return that aims to the student playing his instrumental and effective role in protecting his classmates, family and community from accidents in general and from school accidents in particular * To form health and environment committees in schools with the task of following up environmental matters in general and priority matters in particular that contribute to accidents in schools * To follow up the students after their graduation from schools, through traffic committees consisting of students in coordination with the Traffic Directorate
<p>18- Documentation of the required information and analysis of the monthly statistics</p>	<ul style="list-style-type: none"> * To follow up the documentation of information * To analyze the information on a monthly basis in order to examine the gravity of the deduced health and environmental problems and to make a file for every school for documenting the required information therein * To have a health record at every school containing the required information with the aim of following up the school administration and the academic supervisor

CHAPTER THREE

The Organizational Structure of School Health at Primary Health Care Centers

1. Health Center Manager responsible for the school health at the primary health care center
2. School Health Team
 1. A doctor from one of the medical units at the primary health care center (to be selected as School Health Officer)
 2. A dentist
 3. A Prevention Assistant or Health Trainee
 4. One staff member from the Health Enhancement Unit
 5. An eye examiner (if available at the health center or a health trainee of primary eye care).

Tasks and Duties

Within the Health Center

- 1- To examine the students registered in Kindergarten and Grade One.
- 2- To examine the students applying for colleges and institutes.
- 3- Health awareness to cover academic cadres: through the Medical Unit doctor (School Health Officer) in cooperation with the Officer of Health and Other Programs Unit at the center provided that the awareness activities are documented in (the School Enhancement Unit and the school file at the health center).
- 4- To have an academic employee (a health coordinator) nominated by school administrations at the beginning of the academic year from every educational establishment so as to be in charge of following up all health activities at school provided that the School Director is the General Coordinator and the academic supervisor is liable for following up the work of health coordinators in schools.
- 5- To organize a list of the names of the health and environment friends and the health coordinators at every school for the purpose of training and health follow-up within the academic establishment. The list shall be in the school file and in the health coordinator's record at school.

Outside the Health Center (in Schools)

1. To conduct an environmental examination in Kindergarten, schools, State homes and the institutes for the handicapped.
2. To conduct an eye examination of Elementary school students (Grades 2, 3, 4, 5 and 6).
3. To examine the students of Grade Seven (eye and hearing and to evaluate the nutritional condition).
4. To conduct an eye examination of Grade Four Preparatory students (public, vocational, religious and nursing preparatory).
5. To examine the beneficiaries of the institutes for the handicapped (eyesight, hearing and the evaluation of the nutritional condition).
6. Regulated teeth care.
7. Epidemiological screenings of communicative diseases.
8. Immunization campaigns in schools.
9. Health awareness.
10. Attendance of parent teacher associations.

Duties and Tasks of the School Health Officer

1. To follow up the implementation of school health programs and services by the school health providers at the health center, to organize the work, to coordinate the execution within and outside the health center and to supervise the documentation of those services in the records of educational establishments, universities, institutes for the handicapped and State homes, school cards and in the visit record of educational establishments.
2. The medical units. To determine the impediments facing the work and to attempt to overcome them in coordination with the sector.
3. To organize the field visit schedule annually according to the month.
4. The School Health Officer shall send a list of services rendered in school health to school administrations, State homes and the institutes for the handicapped.
 - 1- The school health team shall make at least one visit to every educational establishment during the academic semester in order to implement school health programs and services (services – environmental follow-up, health awareness and the like).
 - 2- A file shall be opened for the school(s) within the geographic area of the health center.
 - 3- To specify a coordination member among the academic cadre (health / main coordinator) at every educational establishment and the academic supervisor after including them in the training for coordination purposes.
 - 4- To attend the meetings of the parent teacher associations.
 - 5- To coordinate with school administrations the setting up of a time schedule in terms of the dates of new student visits to health centers based on the sequence of students at every school. This schedule shall be displayed at the school administration and the health center. The procurement of the new admission form must be secured to all students (every medical unit shall examine the new students according to specialization).
 - 6- To follow up the provision of transport means to school health teams at remote schools in coordination with the Health Center Director and the primary health care sector at the Health Department.
 - 7- To organize celebrations, in coordination with educational establishments, pertinent to School Health Day and other health occasions.
 - 8- The Health Center Director shall be the chairman of the local committee for examining new students (Kindergarten and Elementary schools) and the students applying to colleges and institutes. He shall also supervise the execution of the plan by the medical units and the committee members at the health center.
 - 9- To have the health information documented in school cards by the school health team in coordination with school administrations and the main health coordinator.
 - 10- To secure the necessities of the school health pouch and to train on them in coordination with the School Health Unit at the department.
 - 11- To follow up equipping the first aid pharmacy in educational establishments and to estimate the annual needs.
 - 12- To compile all the accomplishments executed by the health center according to their statistical forms and to send them to the School Health Sector / Unit by their deadlines.

Communicative Disease Team

The Quick Response Team shall comprise a doctor from the Medical Unit along with the Monitoring Officer and a member from immunization assigned with taking the preventive actions and the quick response.



CHAPTER FOUR

New Student Examination

Objective

The new student examination plan aims to improve the health of students and to enhance it through early detection of medical conditions, their treatment, offering preventive services and awareness and determining the appropriate educational establishments for students according to health condition, this through flexible and organized methods and in full coordination among the health establishments, educational establishments and social institutions according to the levels of offering the service, in addition to documenting the information and data, analyzing them and setting up the required plans.

Plan Execution Requirements

First: The Local Committee

The formation of a local committee for the new student examination plan at every department and the issuance of an administrative order to that effect, consisting of:-

1. Department General Director	Chairman
2. Public Health Division Manager	Member
3. School Health Branch Manager	Member
4. Programs and Systems Branch Manager	Member
5. Manager of the Public Health Branch in hospitals	Member
6. Mouth and Teeth Health Branch Manager	Member
7. Health Enhancement Branch Manager	Member
8. Non-communicative diseases Unit Manager	Member
9. Psychological Health Unit Manager	Member
10. Nutrition Branch Manager	Member
11. Immunization Unit Manager	Member
12. Managers of Primary Health Care Sectors	Member
13. Academic Supervision Manager / Directorate of Governorate Education	Member
14. Manager of Environmental Education and School Health Unit / Directorate of Governorate Education	Member
15. Public Education Director / Directorate of Governorate Education	Member
16. Manager of the Special Needs Care Division in the governorate	Member

Committee Tasks and Duties

- 1- **To prepare and to follow up the execution of the local plan** and to determine the duties and tasks of the committee members.
- 2- **To circulate** the new student examination **plan** in a compact disc to the sectors and the primary health care centers **and to stress to the sectors and the primary health care centers the execution of the plan within a specific period at all health centers.**
- 3- The Public Health Division at the Health Department **shall conduct training courses and seminars** on the plan execution mechanism as follows:-
 - a- To train medical and health cadres working (**involved in the execution of the plan among whom the Managers of health centers**) in the field of school health at the level of the sector, health centers and hospitals while having recourse to specialized doctors in hospitals for the purpose of training, in addition to emphasizing on the job training.
Consultation clinics on:

- First – The work contexts of the new student examination plan for the academic year
- Second – The tasks and duties of the members of the provisional committee formed at the health center.
- Third – The evaluation of the nutritional condition based on height and weight in coordination with the Nutrition Branch at the Health Department.
- Fourth – Eyesight and hearing examination with special equipment available at the School Health Unit and the Eye Health Unit in health centers and some health centers (hearing testing equipment) in coordination with doctors specialized in this field in the governorate.
- Fifth – How to fill all the forms and statistics pertinent to the plan.

- b- **Training the academic cadres** on work contexts, common coordination, information exchange and the preparation of included students prior to examination dates.
- 4- To prepare all the needed requirements for the execution of the plan (stationery, examination and referral forms, new student examination record, evaluation boards of the updated nutritional condition, vitamin A (estimation of the need of the public company to market the drugs and medical equipment and the Nutrition Research Institute through Need Estimation branches at the Technical Matters Division for the forthcoming year)), referral forms, all the equipment of the school health pouch inclusive of the (512) tuning fork for determining the type of hearing loss and other equipment (scale, height measuring tape, a model eyesight examination board and a manual calculator **while emphasizing the provision of a special laptop for the school health units for the purpose of electronic documentation**) while tackling the deficiency in all the equipment and tools required permanently during the execution of the plan ... and to send printed copies of the plan to the sectors and the health centers along with compact discs.
- 5- **To prepare the media plan (community assembly) prior to and during the registration period and which shall be executed by the Health Enhancement Unit in collaboration with the School Health Branch, the Ministry of Information and the local media in the governorate comprising:-**
- a- To coordinate with the local media the announcement of student examination and to broadcast visual health messages (such as videos and plays), audio messages and SMS messages and to hold television, radio and newspaper meetings with physicians in order to direct messages to parents, the administrations of Elementary schools, Kindergarten and the citizens while emphasizing the gratuity of the admission form, the observance of examination deadlines in order to secure obtaining quality services, the importance of early detection of diseases, the mechanism of the examination, the necessity of submitting the student's immunization card and the medical reports, if any, during the examination and to follow up the committee's recommendations according to the condition.
 - b- To conduct courses for the academic supervisors at the Education Directorate in the governorate, members of the parent teacher associations and the media on the subject prior to commencing the execution.
 - c- To make signs or posters about new student examination and to distribute them to health and academic establishments in public areas, provided that they are placed in conspicuous places within the health center.
 - d- To print the required folders for the plan clarifying the importance of student examination and the early detection of diseases and to screen the special needs.
 - e- To print and to distribute the student referral schedule to the administrations of educational and health establishments and to place them in conspicuous places within the health center.
 - f- To print indicative boards illustrating the stages of student movements at the health center in order to complete the required examination, according to the task of every committee member.

- g- To prepare awareness video material (announcement or play spots) and audio and printed ones comprising (health messages emphasizing examination deadlines, the submission of immunization cards and the family and school administration follow-up of the directives and recommendations of the formed committee with snapshots illustrating the stages of registration, examination and referral and the importance of examination) by the School Health Branch in coordination with the Health Enhancement Branch in order to distribute it to primary health care centers and to broadcast it on the center's screen, also to distribute it to Kindergarten and Elementary schools in addition to the local media (satellite channels and radio stations).
 - h- The Health Enhancement Unit shall hold daily meetings with parents of students in order to enlighten them as to the importance of examination and its mechanisms.
 - i- To invest the health visitor program in enlightening the community about the importance of new student examination and the observance of examination deadlines.
- 6- Field supervision by a team, in which the School Health Branch Manager is a member for visiting establishments (health center, Kindergarten, school, consultation clinics and the Special Education Committee), about the accurate execution of this plan. To evaluate the execution of the plan according to the new student examination plan evaluation form enclosed with the plan. To continuously coordinate with the Education Directorates in order to diagnose and momentarily resolve the impediments, to document the field visits, to photograph them and to stress the accuracy of the medical examination and documentation along with on-site training, if required, provided that the supervisory visit is conducted within the first week of the plan execution for perusal of the impediments and the preparation of their appropriate solutions.
- 7- To provide or to rent the transport means at the expense of the department's budget in order to transport the School Health Branch Manager or the local committee team for examining the students in execution of the field visits with the aim of supervising, examining and evaluating the execution of the plan during the academic year.
- 8- To hold a meeting every two months in order to follow up the progress of the plan execution, to tackle the impediments and to examine the statistics, provided that a meeting is held during the first week of the plan's execution for presenting the results of the supervisory visit carried out during the first week of the plan's execution, this in order to put forward the solutions and remedial actions required for the impediments and the problems facing the execution of the plan, in the presence of all the members of the committee.
- 9- To send the two months status of the plan execution stages at the local and lateral level comprising (executed training courses, status of supervisory visits, minutes of meeting of the committee, documented media material and initiatives, but not limited to statistics).
- 10- The local committee shall send a detailed final report on the plan along with a compact disc comprising the following:
- a- An administrative order of the local committee and the minutes of its meetings, documented in photos, as feasibly possible.
 - b- Training courses of the plan (of medical cadres, health cadres and academic and media cadres).
 - c- The equipment and tools provided for the plan based on field conditions.
 - d- Status of supervisory visits pertinent to the new student examination plan comprising the members of the visiting team and the visit observations with their photographic or video documentation.
 - e- The detailed media campaign.
 - f- The statistics (on excel) with their scientific analysis.
 - g- The initiatives.
- To the Ministry of Health / Public Health Directorate / School Health branch shall be submitted a detailed report comprising all the execution stages no later than the 30th of November of every year. The report shall be discussed during the meeting of December at

the Ministry's center in the presence of the managers of school health branches in the governorates.

- h- The local committee shall conduct an evaluation of the percentages achieved at the rate of 20% of the health centers in order to ascertain the accuracy of the examination and documentation and which include all the aspects of the examination, provided that the evaluation is carried out during the first academic semester by visiting Elementary schools and Kindergarten. **The managers of health centers shall be informed of the subject of the field evaluation during the training courses.**

Second: Provisional Committees at Primary Health Care Centers

- The issuance of an administrative order for the formation of a provisional committee at every primary health care center (operating as one team) for the purpose of conducting the examination of new students registered in schools and Kindergarten within the geographic location. The committee shall consist of:-
 1. The Health Center Manager / Chairman of the committee
 2. The school health physician at the primary health care center / member.
 3. The academic supervisor of schools within the geographic location of the health center or the teacher of (Physical Education) / member.
 4. The physician in charge of the regulated care program for mouth and teeth health / member.
 5. The Health Enhancement Unit Officer at the primary health care center / member.
 6. The Psychological Health Unit Officer at the primary health care center / member.
 7. The Nutrition Unit Officer at the primary health care center or a medical assistant trained on weight and height measurement and on the evaluation of the nutritional condition / member.
 8. Child care or immunization doctor at the primary health care center / member.
 9. An eyesight examiner or a medical employee trained on eyesight examination / member.
 10. A medical or health employee trained on the screening audiometer / member.
 11. A vaccinator / member.
 12. A clerk / member.

The most important tasks of the provisional committee for new student examination shall be as follows

- 1- **The committee chairman** / Health Center Manager shall hold a meeting with the Directors of included Elementary schools and Kindergarten (**governmental and private**) in order to discuss the lateral plan and the methods of its execution.
- 2- **The Health Center Manager shall be directly responsible** for the committee's work and the accuracy of the examination and the statistics and he shall open a file for it.
- 3- **The issuance of a time schedule**, by the Primary Health Care Center Manager in coordination with the School Directors, of the deadlines of new student visits to the health center in order to avoid congestion and work confusion. The schedule shall be displayed in health centers and schools. **The examination by the committee shall take place throughout the week.**
- 4- **To emphasize the endorsement of the admission form** that is approved and distributed free of charge by the centers to the administrations of Kindergarten and Elementary schools (governmental and private) within the geographic location of the health center.
- 5- **A sign shall be displayed** on the façade of the health center with an announcement at the health centers about the gratuitous form, the importance of the time schedule and determining the deadline of the visit to the health center for the purpose of examination and cooperation with the examination committee (**the student examination date is not necessarily on the same day he receives the form from the school, but rather according to the examination schedule previously prepared by the school and the health center**).

- 6- The committee chairman shall prepare an appropriate room with ample space at the health center with good lighting to be used by the provisional committee for the examination of new students along with all the examination equipment. **The examination of each student separately shall be observed in order to guarantee the accuracy of the examination, particularly the hearing testing.**
- 7- **To place indicative boards of the provisional committee** facilitating the mechanism of the student's movement during the examination, commencing from the information desk to the eyesight examiner, nutritional condition evaluation, immunization, dentist, and school health doctor (date of disease, clinical and laboratory examination, hearing testing, psychological examination, recommendations and results) and then the documentation in the examination record, with the last station being the scrutiny of the form by the Health Center Manager and its signature along with the seal of the health center.
- 8- **To broadcast video health messages** at the health center and to distribute awareness material (posters and folders) pertaining to the same at the health center and educational establishments (through academic supervisors and committee meetings).
- 9- **To emphasize the role of physicians** at consultation clinics in the final diagnosis and the execution of the required procedures, as the case may be.
- 10- Medical **examination** and filling out the examination form comprising:
The **school health doctor or the pediatrician** shall carry out the following:
1. **Verify the student's medical history** (diabetes, epilepsy, heart diseases and deformities, asthma, blood diseases, psychological diseases, other diseases to be mentioned), the medication history and previous surgeries (to be mentioned).
 2. **General condition:** to verify the presence of paleness **and the referral to laboratory exams, as the case may be.** To investigate posture deformities and apparent defects.
 3. **Examination of the heart, chest and abdomen,** checking for heart diseases or other ailments and treatment or referral, as the case may be, by the school health doctor or the pediatrician.

Eyesight Examination

Examination of the eyes and their annexa inclusive of the eyesight examination (by an eyesight examiner or a trained health employee). The eyesight is measured with eyeglasses for those wearing them according to a chart or eyesight examination board composed of (7) plastic lines (with the letter E).

- It is preferable to examine Kindergarten students with the visual acuity examination board that contains animal pictures or the cube with the finger picture.
- Those normal among them are determined (**6/6, 9/6, 12/6 and 18/6 for both eyes**) and poor eyesight (**24/6 and 36/6** for one eye or both eyes) and referred to eye care community centers or hospitals that offer eye care services and to eyeglasses manufacture workshops for prescribing eyeglasses at the expense of the Health Department.
- Those suffering from severely weak eyesight (**60/6 in one eye or both eyes**) and blindness (**60/3 in one eye or both eyes**) are referred to community eye care centers or hospitals that offer eye care services in order to confirm the diagnosis and to refer them to the Special Education Committee, as the case may be, for taking the appropriate decision for the condition and determining the appropriate grade for their education.
- To verify the presence of strabismus and other eye diseases (by the school health physician or the pediatrician) and to refer to community eye care centers or hospitals that offer eye care services, as the case may be.

Hearing and Speech Examination

The examination is conducted by the **school health physician or the pediatrician** by talking to the child to ensure:

- His sound speech.
- His sound hearing and the detection of any dysfunction in the child's hearing that can lead to problems in speech and/or difficulty in speech.
The ear examination includes checking any deformities in the outer ear and examination with the ear scope of the outer ear and to conduct **the whisper examination for doubtful cases**. This **test** lies in standing behind the child or aside him and talking to him in a whisper while moving away gradually until reaching a distance at which the child indicates that he no longer hears the sound. This test is conducted for every ear separately after covering the other ear. In a normal case, the child can hear the whispering sound up to a distance of 6 meters if the testing location is free of any noise.
- To refer the doubtful cases to the health centers availing of screening audiometers and the examination with the tuning fork (within the equipment of the school health pouch) for the purpose of detecting the type of hearing weakness (air or bone).
- The detected or suspected cases are followed up and the diagnosis is confirmed with consultation clinics in hospitals. They are treated and referred to the Special Education Committee, as the case may be, and they are documented in the form and the records.

Assessment of the nutritional condition: the nutritional condition is assessed by the Nutrition Unit at the health center or the cadres trained to assess the nutritional condition at the health center (exclusively).

Assessment of the nutritional condition: the purpose of the nutritional condition assessment requires the provision of the following tools:

1. An electronic scale (uniscale).
2. A wooden height measurement board (for Kindergarten children).
3. A height measurement tape (for Grade One students).
4. Growth charts for the category (2 – 5 years) for both genders of the World Health Organization and which are available in the nutrition unit guide comprising:
Weight to age, height to age, weight to height and body mass indicator to age.
5. Growth charts for the category (5 – 19 years) for both genders of the World Health Organization and which are available in the nutrition unit guide comprising:
Weight to age, height to age and body mass indicator to age.
6. A table explaining the point drawn on the growth chart pertinent to these categories.
We follow the following steps in the assessment:-
 - Determining the gender of the student
 - Age (day, month and year)
 - Weight (Kg and g)
 - Height (m and cm)
 - Extracting the body mass weight index (Kg) / height squared (m^2)
 - Drawing the points on the growth chart according to student age (0-5) years and (5-19) years in order to evaluate the nutritional condition according to gender and using the following growth charts:-
 1. Height to age chart with the normal z-score being from (-2 to 3). In this chart are determined stunting, severe stunting and excessive height.
 2. Weight to age chart with the normal z-score being from (-2 to 1). In this chart are determined thinness, excessive weight and obesity. The information is entered in the admission and registration form after training the School Health Unit and the Nutrition Unit Officers at the centers by the Nutrition Branch at the Health Department and the above mentioned cases are extracted (normal, stunting, severe stunting, excessive height, low weight, severe low weight, thinness, severe thinness, excessive weight and obesity)

Actions Taken

To offer the required treatment, as the case may be, through coordination with the administrations of Kindergarten and schools (by the Nutrition Unit Officer or the School Health Officer). Referrals are made to the Nutrition Units at the closest health center in the event there is no nutrition unit at the health center for taking the necessary action with regard to the following conditions:

Children below the age of five: low weight, severe low weight, excessive weight and obesity.

Children aged (5-19) years: excessive weight, obesity, low weight, severe low weight, stunting, severe stunting and severe thinness.

New Student Immunization Program Plan

General Objective:- To reduce the disease and death rates from the diseases targeted by immunization.

Special Objective:

- 1- To vaccinate the children (new students aged 4-6 years) with the mixed measles vaccine.
 - The second dose and the second booster dose of the oral polio and the **quadruple** vaccines (if they have not been vaccinated prior to admission to school).
 - In the event a child is registered for the first time in school and is seven years (84 months or more) old, he shall be administered the same vaccines for the second booster dose and the mixed measles while giving the **adult double** instead of the quadruple.
- 2- To continue vaccinating the students refraining from the other vaccines stated in the national vaccination table during the medical examination and upon their enrollment in Kindergarten or school / Grade One.

Method of Execution:

The Immunization Unit at the health center shall scrutinize the vaccination status of the new registered students depending on:

- Child or student vaccination card (requested from his parents)
 - The permanent vaccination record at the health center when the vaccination card is not available
 - The father's or mother's recollection if they are well aware of the vaccination schedule.
- 3- The medical committee must be familiar with the national schedule for routine vaccinations and must possess a copy of the schedule during the examination of new students.
 - 4- Upon verification of the vaccination status and transpiring that the student has abstained from the other vaccines (has not received some vaccines indicated in the vaccination schedule), they shall be administered to him in accordance with the national vaccination schedule and they shall be completed within the first months of school by the health center responsible for the school (with the exception of the BCG vaccine).
 - 5- **The Immunization Unit** at the health center **shall be** responsible for verifying the permanent record, administering the required vaccines during the medical examination, following up the completion of the vaccines and recording the information in the admission form.
 - 6- The immunization information shall be entered **in the register by the clerk** and in the student's school card.

Assessment of Psychological Condition

Assessment of the student's psychological and mental condition (by the psychological health physician or the psychological Health Officer) and administering the required treatment or the referral to the school psychological and social school services, as the case may be, **and entering the information in the form by the psychological Health Officer** and by the Clerk in the register.

Mouth and Teeth Health

It comprises mouth and teeth examination (by the dentist at the health center) according to the new student examination updated form as follows:

- Examining all the child's milk and permanent teeth and listing the number of cavities, missing and previously treated teeth as indicated in the form.
- Examining the gum and entering the condition as indicated in the form.
- Examining the remaining parts of the mouth, inclusive of the tongue, the inner cheeks, the upper lip and the lower lip externally and internally in order to detect any abnormal condition early, such as the presence of an abnormal tumor, fibrosis or ulceration or a change in color or shape and entering the condition as indicated in the form ... and referring the child to a specialized dental center if necessary.
- The required procedures and treatments are administered to all patients, as the case may be, and priority in treatment is granted to cavities and the necessity to do their permanent fillings.
- In the event a dentist is not available, a dentist from the closest health center shall be assigned to the health center, if possible. The teeth shall not be examined by another doctor at the health center in the event a dentist is not available.

Referral and Feedback

1. Entitled students (poor eyesight, weak hearing, psychological disorders, diseases and other defects) shall be referred to consultation clinics by virtue of **two copies** of the referral form sealed with the seal the center along with the number and the date by way of the Public Health branches in hospitals in order to follow the procedures and to ensure the feedback to the health centers.
2. To refer the special needs students to the Special Education Committee at the governorate center by virtue of two copies of the referral form sealed with the seal the center along with the number and the date, to follow the committee's decision, to enter it in the form and the register (feedback) and to send a copy of the decision to the school administration.

The admission form shall be signed and sealed by the committee formed at the health center following the completion of all the examinations, the referral and the feedback, as the case may be, in order to determine the student's admission authority (regular classes, special education classes, institutes for the handicapped).

Documentation

- a- Every health center shall **open a special file** for the admission of new students comprising (the plan, the administrative order of the provisional committee, the deadline schedule for student referral according to school).
- b- The health center shall **provide updated forms** free of charge and continuously throughout the application period.
- c- **The approval of the endorsed admission form** and the medical examination of new students registered in Elementary schools and Kindergartens and which are provided free of charge by the health center to the administrations of Kindergartens and Elementary schools within the geographic location (it is preferable to type the name of the center on the form prior to copying the quantity that covers the student's total requirement and then distributing it after affixing the center's seal). The school and Kindergarten administrations shall in turn paste and seal a recent photo of the student and fill in the fields while noting down the age in years, months and days, **determining the deadline of the student's referral to the health center** within the geographic location of the school according to the deadline schedule and emphasizing to one of the parents the necessity of proceeding with the child to the health center and submitting the vaccination card and the medical reports, if any.
- d- The health center shall **note down all the information and recommendations** to the school administration and the parent of the student, in addition to the school health team, as to taking the required actions in case of detecting a medical condition (referral to the consultation clinic and the Special Education Committee and feedback) or further follow-up during the educational process, also the need for the family's cooperation.

- e- **To organize a special register for the examination of new students** that is arranged according to the enclosed form and where the information of every student is entered. It shall be divided according to Kindergartens and Elementary schools within the geographic location of the primary health care center. The Chairman of the Lateral Committee (Health Center Director) shall be directly responsible for the accuracy and the organization of the register, in addition to the sector Manager and the School Health Officer in the sector. The register shall be subject to scrutiny by the local committee and it shall be deemed a database for following up the health condition of the students in the future.
- f- **The data available in the register shall be entered electronically** and according to the capabilities of the health center.
- g- **The data stated in the examination register** and the statistics record **shall be analyzed** following the completion of the actions taken with respect to referrals, feedback, extraction of health indicators and making the recommendations and required action in their regard by the Health Center Director and the academic supervisors in the local committee and school administrations within the geographic location of the health center. They shall be submitted to the local committee for examination, expressing an opinion and taking the required actions.
- h- The health information shall be entered in **the school card** during the first academic semester by the health coordinator and it shall be verified by the school health team during the field visits.
- i- The Health Center Director shall be **directly liable** for the organization and accuracy of the documentation at all its stages (examination form, referral form, register, statistics and plan file).
- j- **The admission form shall be signed and sealed** by the committee formed at the health center following the completion of all the examinations, the referral and the feedback, as the case may be, in order to determine the authority admitting the student (regular classes, special education classes, institutes for the handicapped). **The signature of the Health Center Manager shall be in the last stage** of the examination following his perusal of the accuracy of the examination and the documentation in the form.

Central Supervision

The health departments in the governorates shall be visited by a central team throughout **the examination period and the academic year** in order to verify and to evaluate the records and forms, in addition to verifying the examination of students. The assessment shall be

A Central Assessment

The plan shall be executed at the health departments according to the following indicators. A copy of the assessment results shall be sent to His Excellency the Minister of Health and His Excellency the Minister of Education with a copy to the Health Committee and the Education Committee at the Council of Representatives and the health departments.

1. The work level of the local committees (administrative order and minutes of meetings).
2. Preparations.
3. Training (theoretical, practical and on-site).
4. The level of the media campaign.
5. The accuracy of the examination at the health centers (inspection with verification of documentation).
6. Flow of work at the health centers (assessment of both health and education sectors) (based upon the inspection and the viewpoints of the service beneficiary).
7. The accuracy of the documentation at the health centers (form, register and statistics).
8. Local field supervision.
9. Initiatives.
10. Assessment of visiting central teams.

A copy of the assessment results shall be sent to His Excellency the Minister of Health and His Excellency the Minister of Education with a copy to the Health Committee and the Education Committee at the Council of Representatives.

Role of Education Sector in New Student Examination Plan

1. To set up a timetable for student referral according to (Elementary schools and Kindergartens) within the geographic location of the health center and in coordination with the health center.
2. Effective participation in the work of the local committees (governorate center) and the lateral ones (health centers).
3. Attendance of training courses of the academic cadres and which are organized by the Health Department.
4. To guide school and Kindergarten administrations not to admit students without a medical examination, the completion of diagnostic and therapeutic procedures, the completion of referral and feedback, as the case may be.
5. To cooperate and to coordinate with the health centers and the parents of students in following up the afflicted students during their regular attendance at educational establishments, as the case may be.
6. To coordinate with the health centers in order to organize the information in the school card.

The image shows a handwritten medical record form for a child named Ahmad Khalid Abu Ali. The form is filled with Arabic text, including a photo of the child, personal details, medical history, and a table for school attendance. The text is written in blue ink on a white background. There are several stamps and signatures on the form, including a circular stamp at the top right and another at the bottom left. The form is held open by a blue binder on the right side.

Note:- Refer to the Annex Chapter.

CHAPTER FIVE

Examination of Students Applying to Colleges and Institutes

Introduction

For the purpose of enhancing the health of university students and expressing a medical opinion as to a student's readiness and qualification to enroll in certain colleges commensurate with his health level and psychological condition, also the detection of medical conditions, their treatment, follow-up, the organization of statistics, the extraction of health indicators and setting up plans for a subsequent follow-up.

Requirements:

The formation of a local committee at the Health Department comprising:

1. Director General of the Health Department / member
2. Public Health Division Manager / member
3. Technical Matters Division Manager / member
4. School Health Unit Manager / member
5. Health Enhancement Branch Manager / member
6. Non-communicative Diseases Unit Manager / member
7. Eye Officer at the Health Department / member
8. Psychological Health Unit Manager / member
9. Representative of the Ministry of Higher Education in the governorate / member

The local committee shall follow up the work of the provisional committees formed at health centers included in the field examination of students applying to colleges and institutes and it shall remedy the impediments and prepare the controls for the examination (published in Al-Waqaea Al-Iraqiya "Iraqi Facts" newspaper) of which a copy is enclosed.

Work Mechanism:

An administrative order shall be issued by the Health Department as to the formation of a provisional committee for the examination of Preparatory stage graduating students applying for admission to colleges and institutes, among which teacher preparatory institutes, this at the beginning of the academic year by endorsing the examination instructions and controls at included primary health care centers. It consists of:-

- 1- The Health Center Manager.
- 2- The physician in charge of school health.
- 3- The psychological health doctor.
- 4- The internal medicine physician (practitioner or specialized) or the family doctor.
- 5- Practitioner or specialized ophthalmologist.
- 6- Ear, nose and throat physician (specialized or practitioner).
- 7- Eyesight examiner.
- 8- Clerk.

The formed committee shall conduct the following examinations **prior to** admitting the student to a specific college and institute (among which the teacher preparatory institutes). The prepared examination form shall be endorsed by the Ministry of Health and the final status shall be recorded in the form, in addition to the form sent by the college, the institute or the school.

- 1- Lung and heart examination.

- 2- Eyesight examination comprising the visual acuity examination, the color blindness screening and the examination of the eye lens, retina and optic nerve. To verify the presence of fixed or mobile strabismus or nystagmus.
 - 3- To verify the presence of congenital or physical deformities preventing movement and work.
 - 4- To verify that speech is sound and intelligible.
 - 5- To verify the absence of psychological, mental and neurological diseases.
 - 6- Hearing testing and with audiometer, if required, provided that any hearing impairment does not exceed twenty standard audio units.
 - 7- To verify that the student is free of chronic and incurable diseases.
- In the event conditions transpire necessitating the referral to the Education Committee in the Medical Committees Division in order to issue a decision for the student to pursue his studies at colleges and institutes appropriate for him. The decision of the Education Committee shall be followed up and recorded in the form and in the register of the provisional committee at the health center. Statistics shall be sent according to the special enclosure to that effect following the completion of the examination period, no later than the 30th of November of every year to the School Health Branch / Primary Health Care Division / Public Health Department.

Documentation:

1. The examination form shall be endorsed according to the enclosure (medical examination form for applicants to universities, institutes and vocational schools) in the examination of students applying to universities and institutes. It shall be available at the health center for the purpose of copying it by the applying students.
2. A special register shall be organized for the examination of applying students according to the enclosure (register plan for the examination of students applying to universities and institutes).
3. The statistics shall be entered according to the enclosure (college and institute student examination statistics) and the health indicators shall be extracted for follow-up with university health centers.

Note: Refer to the annexes.

CHAPTER SIX

Control of Non-communicative Diseases in the Domain of School Health

Unit Responsible for Offering the Service at the Health Center:

1. Non-communicative Disease Officer.
 2. Nutrition Officer.
 3. Eyesight Examination Unit.
- Coordinator: Health School Services Officer.

Introduction

Non-communicative diseases are diseases that are not transmitted by way of contagion. They are often chronic and are mainly represented in diseases of the heart, blood vessels, cancer, diabetes and chronic respiratory diseases. The accumulation of these diseases and the complications, along with the spread of risk factors causing them, are the cause for 50% of diseases and early deaths in Iraq.

Objective

To define the medical and health cadre working at the health center (Non-communicative Diseases Officer) in non-communicative diseases and the methods of their control and prevention and which the students in schools often contract.

Qualitative Objective:

- To offer eye health care services and to detect early the cause for blindness which can be avoided (poor eyesight, weakness of the eye muscles, strabismus, and the like ...).
- To detect malnutrition (obesity) conditions in targeted students (by trained health cadres working at one of the medical units in the health center).
- To increase health awareness among the medical and health cadres in health centers, teachers and school students about eye health and obesity along with the control and prevention methods, this through the coordination with the Health Enhancement Unit at the health center.

Mechanism of Execution:-

With Respect to Eyesight Examination

- 1- The participation of the eyesight examiner in the provisional committee for the examination of new students registered in Kindergartens and Grade One.

From	To	Diagnosis
6/6	18/6	Normal
Less than 18/6	60/6	Poor eyesight
Less than 60/6	60/3 counting the fingers at a distance of 3 meters	Very poor eyesight
Less than 60/3	Not sensitive to light	Blindness

World Health Organization Classification of Poor Eyesight and Blindness:-

- 2- Eyesight examination, detection of strabismus conditions and measurement of visual acuity in Elementary school students (Grades 2-6), Grade One and Grade Four in Preparatory Schools, High Schools, vocational schools, religious schools, nursing preparatory schools, institutes for the handicapped and the beneficiaries from States homes (of student age) by the eyesight examiner at the medical unit or one of the health staff (Medical Assistant) among those trained on eyesight examination. The examination is conducted at the health center or at schools in Grade One classroom. Those with poor eyesight where the visual acuity is less than 18/6 are referred to community eye health centers or hospitals that offer eye care services. The referral shall take place during the second academic semester. The school health team stresses wearing eyeglasses to students with poor eyesight.
- 3- To offer primary eye care to the cases referred from schools. The students, suffering from eye diseases necessitating secondary care such as cataract, infections and scotoma of the cornea, red eye, external intensity, glaucoma, diabetic retinopathy and other diseases, are referred to community eye care centers and hospitals for the purpose of treatment.
- 4- The eyesight examiner or the trained health employee shall conduct health awareness and hold conferences within the classrooms about eye health, eye disease and the methods of prevention.
- 5- To enter the information in the student's school card and to prepare the statistics pertinent to student eye health.

Note :- Visual acuity with corrective eyeglasses.

Instructions for Visual Acuity Measurement (Refer to the Annex).

The examination board shall be placed on the wall at the same level of vision in a lit room opposite the window, and not beside it, because the light will shine in the eye of the student and will affect the examination.

- 1- The student must stand at a distance of six meters from the board or three meters in the event there is a mirror.
- 2- Always begin the examination with the right eye, enter the result and then examine the left eye.
- 3- Cover the eye with a trial frame while ensuring not to press hard.
- 4- Point below the letter to be read with a black stick or a black pen. The student must point with his hand to the direction of the letter or the opening. Do not respond to the words right or left because the student mixes them up.
- 5- Be patient and encourage the student during the examination. As most children fear the examination, similarly to a test, or fear eyeglasses, they attempt to cheat and look through the fingers. Move the board closer to the student and explain the subject to him. Always begin with the large letter and descend gradually as it is easier to see and so that the student is accustomed to the examination, then return the student to a distance of six meters.
- 6- In order to note down the visual acuity, the student must see more than half the letters on the line. If he sees less than half the letters, note down the degree of the line preceding it.
- 7- In the degree 6/6, the denominator is stable and represents the distance of six meters between the student and the board. As to the numerator, it is variable according to visual acuity.
- 8- The visual acuity of 18/6 and below requires a referral to a health center where there is an eye examination branch or close hospital for the examination of eyeglasses.
- 9- The visual acuity, that ranges from 24/6 to 60/6 in the better eye and which does not improve even with prescription eyeglasses, requires a referral to Special Education classes for those with poor eyesight.

- 10- Ask the teacher about the students suffering from copiochia while reading, burning, tearing, eyelid movement, congestion, the appearance of recurrent boils on the eyelids, difficulty in seeing the blackboard and the students who have prescription eyeglasses and do not wear them.
 - 11- A visual acuity of an eye less than finger counting at a distance of three meters is lacking.
 - 12- Refractive defects and strabismus affecting one eye and not treated before the age of seven will lead to functional laziness in the afflicted eye and normal eyesight cannot be subsequently restored.
- Definition of poor eyesight: it is a low visual acuity detected in the eyesight examination board up to 18/6 in both eyes after correction with eyeglasses.
 - Visual acuity: it is the eye's ability to distinguish the shape and details of objects. A normal eye can focus the light falling on it in the pupil of the eye retina.



Hearing Testing

Method of Hearing Testing

- The regular student's ability for academic performance depends on knowing what takes place around him and the ability of his receptor systems, i.e. the senses, to receive what is going on around him. When the ability of the ears to do the same decreases, this is called hearing impairment.
- The necessity to maintain the hearing health stems from most of the reflections in theoretical lessons being auditory reflections. On this basis, hearing impairment greatly impacts the student's academic performance.
- The simplest hearing test is called **the whisper test**. When weak hearing is suspected, the acoumeter, available in certain health centers and with which the physicians of health centers and schools falling within the geographic location of the center are familiar, is used. In the event weak hearing is proven, the student is referred to the hearing and speech center or the ear, nose and throat consultation clinic in hospitals.



Assessment of Nutritional Condition

It is conducted by the Nutrition Unit Officers at health centers where these units are available or one of the health staff working in the medical units, provided that he is trained to assess the nutritional condition of students and is provided with all the assessment plans.

Assessment of the Potential Risk of Suffering from (Chronic Diseases) for Detected Obesity Conditions.

- To form a joint committee from all the School Health, Non-communicative Diseases, Health Enhancement and Nutrition Officers, that trains the educational cadre in the school (two) on conducting weight, height and body mass index examination and entering it in the school card of every recently registered child in order to detect malnutrition cases, whether stunting, emaciation, excessive weight or obesity.
- The detected cases shall be referred periodically to pediatricians or endocrinologists at the hospital falling within the geographic location, this in order to verify the absence of medical reasons and treating them or to send them to a Nutrition Specialist to begin with him the nutritional consultation and the physical activity.
- To follow up these children continuously with feedback from the specialized physicians in order to know the actions taken and the achieved success.
- This data of the examined children shall be sent to the School Health and Non-communicative Diseases Branch in order to evaluate the nutritional situation of the students and the risk factors to which they are exposed.

Control of Obesity in Students

- To diagnose and to treat obesity by medical and health cadres working in primary health care centers.
- To provide awareness material to included schools.
- To provide a suitable environment for exercising.
- To compel school administrations to provide healthy food.
- To invest in the meetings of the parent teacher associations in order to acquaint them with obesity and with their role in the detection and follow-up of obesity cases.



CHAPTER SEVEN

Mouth and Teeth Health

Objective of Chapter:

The chapter aims to acquaint the dentists working in public dental units at primary health care centers with the set work mechanism of mouth and teeth health services, among which the regulated care of mouth and teeth health for students of Elementary schools and children in Kindergartens and nurseries and with the desired objectives from its implementation as part of school health services

Regulated Care Program for Mouth and Teeth Health

This program is deemed among the significant prevention programs executed by the Ministry of Health for targeted categories, namely students of Elementary schools and children in Kindergartens and nurseries, through public dental units in primary health care centers under the supervision of the Mouth and Teeth Health Division at the Technical Matters Department.

This program has been implemented since 1978.

Objective of Program:

To enhance the health of mouth and teeth and to reduce the rate of cavities in students of Elementary schools and children in Kindergartens and nurseries.

General objectives:

- To offer preventive and remedial dental services to the targeted categories included in this program in Baghdad and the governorates.
- To spread health awareness among the targeted categories.

Qualitative Objectives:

- To cover the Elementary schools and the remaining previously targeted categories in Baghdad and the governorates in the mouth and teeth regulated health care program by examining and treating patients according to the rates determined for examination and treatment in the annual plan of every academic year.
- To cover the Elementary schools and the targeted categories in Baghdad and the governorates in the health awareness in the area of mouth and teeth health according to the rates specified in the annual plan.

Program Execution Work Mechanism:

- All the public dental units at primary health care centers in the governorates (governorate, district and regional centers) shall be deemed as centers offering preventive and remedial mouth and teeth health services to the categories targeted by the program.
- The dentists working in public dental units at primary health care centers shall visit these establishments at the beginning of the academic year and examine the teeth of students. Those among them suffering from mouth and teeth diseases shall be called throughout the academic year for treatment at the public dental units of the primary health care centers in Baghdad and the governorates.
- The included schools within the geographic location of the health center shall be nominated for every dental unit and the administration of those schools shall be notified of their inclusion in the program.

- The required treatment shall be administered to the patients whereby preventive and remedial dental services are offered (such as all types of permanent fillings, crack fillings, removal of plaque deposits and fluoride treatment for the covered categories according to the annual plan).
- All the details of the examination and treatment of patients are documented in the mouth and teeth regulated health care card (enclosed with the annex of the guide).
- The dentists shall make at least two awareness visits annually to every school included and not included in the regulated care program whereby they lecture in the area of mouth and teeth health. This shall be entered in the school health visit register, also in the health center register.
- The dentist or a dental preventive assistant shall, in coordination with the school health team, visit the Elementary schools and notify them of the visit dates and the executed activities, such as awareness lectures on mouth and teeth health and the distribution of posters, toothpaste, toothbrushes and other awareness material.
- The dentists in charge of the regulated care program execution at the public dental units shall coordinate with the administrations of included Elementary schools at the beginning of every academic year.

Monitoring and Assessment:

- The dentists at the Preventive Dental Branch in the Mouth and Teeth Health Division / Technical Matters Department at the Ministry's center shall enter the statistics incoming from the Health Departments in Baghdad and the governorates, and he shall prepare the preliminary and final reports for the program and extract the examination and treatment rates ...
- The dentists at the aforementioned division shall make field visits to the primary health care centers and their affiliated Elementary schools in order to follow up the accurate execution of the program based on its annual plan of the program, this by scrutinizing the examination and treatment of students and matching them with the regulated care cards.
- The Dental Officers in the primary health care sectors and the managers of Dental Branches at the Health Departments in Baghdad and the governorates shall be responsible for the execution of the plan and its follow-up through field visits to the primary health care centers and their affiliated Elementary schools. They shall also send the preliminary and final reports by their specified deadlines.
- The Dental Services Monitoring Branch at the General Inspector Office shall follow up the execution of the program and verify the statistics in the final report prepared by the Preventive Dental Branch at the Mouth and Teeth Health Division based on the final reports incoming from the Health Departments in Baghdad and the governorates.
- Coordination with the School Health Branch affiliated to the Primary Health Care Division at the Public Health Department shall take place in order to continue offering mouth and teeth health services to the categories covered by school health and the execution of the annual plan ... whereby they shall be provided with the updated annual plan prior to the beginning of the academic year, also the final reports inclusive of the statistics of these services and incoming from the Health Departments in Baghdad and the governorates at the end of the academic year for perusal of the final completion rates of examination and treatment, the impediments to plan execution and the collaboration to overcome these impediments.

Teeth Examination of New Students

It comprises the mouth and teeth examination by the dentist at the health center according to an updated new student examination (enclosed with the annex of the guide) as follows:

- Examining all the milk and permanent teeth and listing the number of cavities and missing and previously treated teeth as indicated in the form.
- Examining the gum and entering the condition as indicated in the form.

- Examining the remaining parts of the mouth, inclusive of the tongue, the inner cheeks, the upper lip and the lower lip externally and internally in order to detect any abnormal condition early, such as the presence of an abnormal tumor, fibrosis or ulceration or a change in color or shape and entering the condition as indicated in the form ... and referring the child to the closest specialized dental center if necessary.
- The required procedures and treatments are administered to all patients, as the case may be, and priority in treatment is granted to cavities and the necessity to do their permanent fillings.
- In the event a dentist is not available, a dentist from the closest health center shall be assigned to the health center, if possible. The teeth shall not be examined by any other doctor at the health center in the event a dentist is not available.
- The dentist shall sign the admission form.

Dental Services for Those Covered at State Homes, the Severely Handicapped and the Educational Institutes for the Handicapped

The Public Dental Units at the primary health care centers shall offer preventive and remedial dental services to those covered at State homes whereby the dentists working at these centers shall examine those covered at State homes and treat the patients among them in health centers.

The Public Dental Units have been created in public State homes in Baghdad and the governorates whereby a separate room for the Dental Unit has been assigned at every home and equipped with dental equipment along with all the required dental material and tools by the Health Departments in Baghdad and the governorates. A dentist shall be assigned for two days per week for a period of three months for every home in order to examine and treat those covered in the home.

In the event providing an appropriate separate Dental Unit room inside the home proves to be difficult, its affiliated health center within the geographic location or the Preventive Dental Unit at the specialized health center in the governorate center shall offer the services.



CHAPTER EIGHT

Control of Communicative Diseases in School Health

Services Rendered by:

- The Communicative Diseases Officer at the health center and the sector.
- The School Health Officer.

Communicative Diseases

The Public Health Department, represented by the Communicative Disease Control Center, strives continuously to offer the services and coordinates with all the participating authorities, particularly with school health, for the purpose of raising the quality of the services, performing its tasks and rendering them of a high quality level in order to protect the student from communicative diseases by setting up a plan for the communicative diseases in coordination with the School Health Branch at the Primary Health Care Division, among which:-

1. Leishmaniasis and Common Diseases Comprising

Skin Leishmaniasis

Skin leishmaniasis is a skin disease of multiple shapes that occurs in the skin, the mucous membranes whereby it scrapes ulcerations that self mend or in the form of cutaneous mucous lesions that affect the mucous membranes of the nose and the mouth following an initial cutaneous infection.

Cause:

A parasite that lives in dogs and rodents which constitute a depository for it.

Transmission Methods:

From an afflicted person to a healthy one by way of the bite of the female sand fly (Phlebotomus).

Preventive Actions:

- 1- Detection of afflicted cases and their treatment.
- 2- Removal of waste and garbage from school yards.
- 3- Extermination of loose dogs in the geographic location of the school.
- 4- Extermination of rodents present in school warehouses and rooms.
- 5- Health awareness of students as to keeping away from places infested with sand flies after sunset, also keeping away from disease depositories (not to play with dogs and cats).
- 6- Getting the students accustomed to sound environmental practices such as getting rid of waste by throwing it in its designated places and washing the hands with water and soap.

2. Malta Fever

It is among the bacterial diseases that are transmitted from animals by way of dairy products contaminated with bacteria. It is among the diseases native to Iraq. All the governorates record high occurrences annually.

Means of Contagion:

It is transmitted to humans by one of the methods:

1- Direct Contact:

This involves the entrance of the germ into man through wounds or scrapes, also through the respiratory system and the pupil of the eye and its contaminated secretions, such as workers in slaughterhouses, live stock, assistants in animal births and butchers.

(By way of wound infections in the skin) and workers in meat preparation, veterinary doctors, also in laboratories during cultures and bacteria isolation where the transmission occurs usually through the respiratory system.

2- Indirect Contact:

- a- By ingesting milk and its products, particularly soft cheese that is made from non-sterilized or pasteurized milk.
- b- Rarely occurring means recorded in blood transfusions, organ implant and sexual intercourse.
- c- No cases have been recorded for the direct disease transmission from one person to another. However, cases have been recorded for bacteria transmission from a nursing mother to the children through milk.

Prevention:

Student awareness as to not ingesting milk and its products, especially soft cheese, ice cream made from non-sterilized or pasteurized milk.

3. Toxoplasmosis

There are two types of the disease:

a- Congenital Toxoplasmosis in a pregnant woman may lead to:

A miscarriage or the birth of a fully mature fetus with manifestations of:

Hydrocephalus – infection of the eye retina – cerebral calcifications.

Cutaneous manifestations – skin rash.

System manifestations:- enlarged liver and spleen.

Medical Reason:

A parasitic infection called Toxoplasmosis Gondi of the staphylococcus spores. It is considered among the congenital diseases transmitted either from infected mother to fetus via the placenta or acquired from the animal (depository) such as cats, dogs and birds. The disease is transmitted by way of the digestive system from food contaminated with oocyst.

b- Acquired Toxoplasmosis

The disease appears through extensive contact with cats with the following manifestations and signs

- Cutaneous manifestations: a crimson rash, pink papules or subcutaneous nodules appear.
- Several organs are afflicted causing encephalitis – hepatitis.

Means of contagion:

A common disease to man and animal with an animal origin (cats foremost, dogs, sheep, cows, rodents, birds, poultry, pigs and rabbits).

The disease is transmitted by way of the digestive system from food contaminated with oocyst present in the excrements of afflicted animals. It is also transmitted by way of contaminated meat which, in some of these cases, is not cooked properly (Kebab, Tikka) and is transmitted from pregnant mother to fetus through the placenta causing miscarriage, congenital deformities or the death of the baby in the mother's womb.

Upon the parasite entry to the mouth, the digestive system, the intestine walls and subsequently to the circulatory system and from it to the endothelial system of various body parts (organs) such as the brain, lungs, liver, lymphatic glands, muscles and heart and as a result of the parasites striking the cells, tissue changes occur and some cells fill with parasites and become atrophied with leukocyte cells.

Types of Disease:

1- Genetic type

2- Acquired type

Genetic:

Its cause lies in the parasite transmission from mother to fetus through the placenta. The neurological system is usually afflicted as a result of the nerve cells infection. Their impact is observed immediately after birth with some living for several weeks while others reach the maturity stage. The affliction of the mother during the first trimester of the pregnancy may lead to miscarriage. The first affliction does not affect pregnancy in the future (i.e. it causes miscarriage only once). The affliction of a pregnant mother may cause a congenital deformity to the fetus such as mental retardation, epilepsy, affliction of the eye causing the presence of dark spots in the fluid or an infection of the retina and the conjunctiva thus leading to loss of eyesight.

Acquired:

1- The Lymphatic Type

It is the most widespread as it afflicts various ages, especially workers coming in contact with animals. It causes an enlargement of the lymphatic nodes with the glands becoming of medium size, solid and usually not painful and the distension continues for months at the beginning of the affliction.

Disease Control in Animals:

- To isolate the places for raising cats, dogs and other pets in the home, to clean them periodically and to ensure their safety through periodic veterinary examinations.
- To exterminate loose dogs and cats by veterinarians in periodic campaigns, whenever possible.
- To isolate the home kitchen from the places of raising animals, to close the doors at night and to place screens on windows in order to control the disease in animals.
- Health awareness of housewives by washing the hands after cutting meat, cooking it thoroughly and forbidding the children from mixing with dogs and cats.
- To provide diagnostic and therapeutic material at the governorate level.

b- Rabies

It is a common dangerous disease that afflicts man and is caused by a virus to the central nervous system (brain and neural cord) of all mammals by way of animal saliva that carries this virus often in dogs or bats. This is accomplished in two ways:-

a- Directly by way of a bite by an animal carrying this virus

b- Indirectly when a wound on the human body is exposed to the saliva of an animal carrying this virus (while playing with it). In both ways, the virus is transmitted to the wound and the nerves then to the brain. It is often called water phobia or fear from water.

Source of Contagion:

Pets, wild animals, dogs, foxes, wolves, coyotes (small American wolf), cats, raccoons and other biting animals. As to the blood sucking bat and the fruit eating bat, they are animals that transmit the disease and do not manifest its symptoms. The source of disease contagion to humans is the saliva secretions of rabid animals.

Symptoms of the Disease:

In animals

There are two types of symptoms:-

- 1- The calm condition:- it is characterized by abnormal calmness and lethargy of the animal in a manner than draws attention while it refrains from drinking and eating and manifests paralysis, especially in the esophagus and hind legs.
- 2- The agitated type:- it is characterized by strong agitation with an inclination to attack and a high secretion of saliva with occasional foaming at the mouth, and the animal fears moving objects (leading to the afflicted animal jumping on them and sinking its teeth in them thus leading to the transmission of the virus with the saliva) and is secluded in dark places.

In humans, the manifestation of symptoms depends on the place of the bite and its sequence (on the face, the hand close to the brain or the leg ... the closer the bite is to the head, the more quickly the symptoms will appear) fever, cough, excessive sensation of the place of the bite, pain in the esophagus, difficulty in swallowing, particularly liquids, with the occurrence of spasms in the throat, muscle tension, spasms, numbness, the muscles not functioning, the feeling of lacking rest and relaxation, fear of light and water, nerve tension, coma and subsequently death as a result of paralysis in the respiratory muscles.

Persons Prone to the Disease:

- Whoever is exposed to the bite of a rabid animal.
- Persons who enter wildlife habitats.
- Workers and employees entrusted with conducting medical investigations.
- Workers in veterinary laboratories.
- Children in general.

Disease Prevention and Control:

The responsibility is shared between the Ministry of Health and the Ministry of Agriculture / Veterinary Directorate, namely:

To vaccinate the dogs every two years and to stress the health certificate to dog owners, also dog vaccination campaigns in the countryside.

As to the Ministry of Health, it selects and provides the rabies vaccine and serum.

Ages Prone to Affliction:

- Most ages prone to affliction are less than 15 years, particularly in males due to their presence outside the home, the strength of the dog when agitated and the difficulty for these ages to resist the attack of those rabid dogs.

Health Education:

Health education for citizens shall begin with encouraging the children not to play with animals and not to touch dogs of a peculiar nature and it shall end with the importance of having the vaccine and serum administered, also to stress the number of doses because most parents do not know the true number of doses. This shall be accomplished by placing introductory signs in the places where the doses are administered (such as emergency corridors or halls).

The most important ways of preventing the affliction of rabies by humans is vaccination, especially immediately after the bite. The doses depend on the type of the currently available vaccine. In case of severe and multiple wounds, the doses shall be administered as follows:-

(First day, third day, seventh day, 14, 28, 56) with booster doses after one year and 3 years.

The vaccine must be administered immediately after the bite without delay, particularly in the area where rabies affliction abounds. In the event the wounds occur on the head, face or neck or there is a possibility

that the animal is rabid, the serum of this disease must be administered in addition to the vaccine. It is preferable to receive the serum and the vaccine on the same day of the bite and to continue to take the doses upon the animal's escape or death. When the dog is confined, it shall be observed for a period of 10 days while remaining in a good condition without manifesting any symptoms, and then the vaccine doses can be stopped.

4. Viral Hepatitis

Viral hepatitis is a disease that afflicts the liver cells and is caused by a group of viruses of several types

- a- The types that are transmitted with contaminated water and food and their symbol is (A&E).
- b- The types that are transmitted via blood and its products and other body fluids. Their symbol is (B, C, D&G).

Students in schools are the most prone to affliction with the types A&E and consequently the following points are among the duties of the School Officer:

- 1- Health awareness of students as to the necessity of following the rules of general and personal hygiene, be they washing the hands with water and soap prior to eating, after leaving the bathroom and after playing, not eating uncovered food or washing the vegetables and fruits well.
- 2- When there is a case of jaundice among school students, he shall be sent to the responsible health authority for the purpose of having the required examinations in order to ascertain the type of the causing virus. The compulsory leave system shall be applied for the patient for a period not less than one week following the disappearance of the jaundice.
- 3- To ensure the cleanliness and sterilization of drinking water at school.
- 4- To ensure the cleanliness and sterilization of the school health facilities and the use of the required sterilizers.
- 5- With respect to the type B, the School Officer must ascertain that the students have received three doses of viral hepatitis of the type B upon registration at school by referring to the health register. He shall encourage the administration of three doses of vaccine in the event they are not taken and he shall spread health awareness among the students.

5. Severe Respiratory Diseases

School administrations shall observe the following points in view of their importance in spreading these diseases that afflict the upper and lower respiratory tracts of humans by:

- 1- Classroom ventilation.
- 2- To reduce congestion and crowding in the classroom at the end of the school day.
- 3- To prevent crowding when the students leave the classroom.
- 4- To ensure the cleanliness of the classroom and the students' personal hygiene.
- 5- To ensure meeting the vaccine requirements against respiratory diseases according to the immunization program. This shall be followed up by verifying the student files and contacting them personally.
- 6- To immediately report any respiratory disease that affects more than one class and to pay attention to this subject through the responsible health centers.
- 7- To pay attention to the cleanliness of the canteen, to provide the healthy conditions for foods available in the canteen and to follow up their implementation, provided that the workers in the canteen obtain the health certificate that substantiates that they are free of communicative diseases.
- 8- To use good quality chalk.
- 9- To hang posters and folders in the classrooms that encourage awareness and the prevention of diseases which afflict the human respiratory system and aim to enlighten the students in terms of health.

6. Severe Intestinal Diseases

They are diseases that result from medical reasons in the digestive system and are transmitted by way of water and food such as (cholera, typhoid, food poisoning and the circulating virus). In order to decrease the affliction among children and school students in all stages, the following must be observed:

First:- Environmental sanitation

- a- To provide potable water throughout the academic year.
- b- To provide sanitation facilities commensurate with the number of students at every school.
- c- To periodically examine the water tanks and to draw specimens for the purpose of testing the percentage of chlorine and bacterial testing of the water.

Second:- Health awareness of communicable diseases by way of water and food through the coordination with health centers within the geographic location.

- a- To hold lectures on the causes and prevention methods of these aforementioned diseases.
- b- To spread posters about hygiene methods and the importance of washing the hands prior to eating and after exiting the bathrooms.
- c- The necessity of not keeping food for a long time prior to consuming it.
- d- Instructions not to purchase exposed food.
- e- To encourage students to bring their own drinking water.

Third:- Coordination with school administrations and instructing them as to the necessity of early monitoring of diarrhea cases and the importance of their expeditious referral to health centers within the geographic location in order to confirm the medical condition.

Fourth:- To impose health monitoring on school canteens.

7. Schistosomiasis and Intestinal Diseases

Schistosomiasis and intestinal diseases are among the parasitic diseases that affect the general health in Iraq and thus impact the general health, in particular the people living in conditions that facilitate the affliction with these diseases and their transmission (high risk conglomerates) that include children of school age, farmers, irrigation laborers and particularly women in rural areas. The danger of these diseases lies in the complications they cause, particularly in children of school age, and they range from anemia to growth delay.

With respect to intestinal parasites, they range from chronic complications in the urinary system to bladder cancer among the adults afflicted with schistosomiasis as a result of the perseverance of the severe contagion during childhood. In order to control and prevent these diseases, coordination with school administrations and health departments shall take place through the following:-

- a- To set up a joint plan for the academic period from 1/10 until 1/5 of the following year.
- b- To classify schools according to age brackets or stages.
- c- To classify schools according to geographic locations and topography.
- d- To classify schools according to type of culture (urban – or rural).
- e- To classify schools according to type of construction in residential areas (mud building – brick building).
- f- To enter the information incoming to the joint committees in registers and computers and to consider it as an archive.
- g- To make field visits to schools and to nominate a liaison member between the school and the health establishments included in the execution of the joint committee plan between the schistosomiasis and Intestinal Parasites Branch and the school health.
- h- Health awareness through the preparation of epidemic booklets and leaflets and scientific films about the diseases of the Branch and the role of school health in guiding the preventive aspect,

protecting the student from communicative diseases and participating in the preparation of media messages.

- i- To conduct the periodic examinations of students, to get urine and stool specimens for diagnosis purposes, to stress health awareness within the school and to correct inappropriate health behavior in the prevention of the disease.
- j- To administer prompt and appropriate medication for treating students and following them up by the school administration and the health center.
- k- To maintain student restrooms, drinking water sources and hygiene, also swimming in contaminated water sources and the food canteens.

8. Malaria

With regard to malaria, the following shall be carried out:

- a- To introduce in a simple manner malaria to students, its causes and the type of mosquitoes transmitting it.
- b- To educate and to teach students the significance of the activities executed in the field in order to control a dangerous disease such as malaria, namely
 - The activity of night fogging in cities and villages
 - The activity of internal spraying in cooperation with the health teams conducting it
- c- To educate the students on personal prevention of night bite exposure such as wearing long garments when circulating at night in public parks and covering the limbs and the face when sleeping at night.
- d- To educate the students as to the necessity of using mosquito repellants inside the home.
- e- To refer exposed students to the nearest health center in order to take a blood swab to ensure the absence of malaria.

Disease Transmitters

Introduction

The diseases transmitted by arthropods (disease transmitters) are among the main reasons for the occurrence of disease and death. They comprise malaria, filarioidea, leishmaniasis (black fever and Baghdad button), trypanosoma, Dengue fever, schistosomatidae – hemorrhagic fever disease, cellular encephalitis and typhus ... and other diseases of which some have become a health problem in Iraq due to early death and early disability. They represent a huge impediment to economic growth as a result of the wasted work hours, the high prices of patient treatment and disease transmitter control, in addition to the death cases they cause, particularly when lacking the required preventive actions to contain the disease.

Most Important Targeted Transmitters in Schools

Mosquitoes, sand flies, home flies, lice, cockroaches, bed bugs and rodents.

For the control and prevention of these transmitters, coordination with the Health Departments and school administrations must be through the following:

- a- To carry out the below activities in order to control the number densities of disease transmitters and rodents to the level with which no health problem is manifested, namely as follows:
 - To screen lice cases among students and to coordinate with school administrations their treatment so as not to spread among students.
 - To spray rooms, kitchens and bathrooms with long effect insecticides through a plan set up by the analogue units in governorates.
 - To spray containers (that are used to collect garbage and other waste), if any, with Agita home fly control insecticide.

- To spray water compounds close to school locations with Abate insecticide when filling them in by the relevant authorities proves to be difficult.
 - To combat cockroaches with Max Force (gel) insecticide through the distribution of points in cockroach hideouts. The school administrations must notify the health authorities supporting them of the presence of these insects.
 - To distribute the poisonous points of rodent control in their hideouts away from the sight and movement of students and to place adhesive traps in their paths.
 - The geographic locations surrounding the schools shall be included in all the field activities executed to control disease transmitters.
- b- To coordinate and to collaborate with school administrations not throwing waste or allowing it to collect within or near the schools, provided that it is transported through the quickest possible method so as not to be present during official school hours.
- c- To hold meeting and scientific seminars for faculty on the scientific methods contributing to the control of transmitter number densities and the role of the supporting authorities in this area.
- d- School cadres shall participate in scientific seminars and courses pertinent to the control of disease transmitters and which are conducted by the concerned Health Departments.
- e- To guide school administrations in the coordination with the Municipal Departments with the aim of tackling low environmental conditions in the areas where the schools are located.

Field Control Activities

- a- Insect and rodent medical units carry out field campaigns to control disease transmitters and which are previously highlighted in the objectives of the plan ... in all types of school buildings or their surroundings in accordance with the instructions of various spray and control method usage by their affiliated technical cadres in coordination with school administrations. It is preferable to conduct all the activities on official school holidays, particularly spring and summer vacations.
- b- Upon the detection of lice (head lice) cases among students, the following is carried out:
- Personal hygiene of students and washing the hair daily. This shall be in coordination with the families of the afflicted students.
 - To guide the families of students as to the use of special medical shampoos for controlling lice conditions and which are approved by health establishments, provided that the washing process continues until the disappearance of the affliction.

CHAPTER NINE

Immunization

Service Providing Unit:

Immunization Unit

- **School Health Officer**

The workers in the field of school health (school health team) will be able, in coordination with the Immunization Unit at health centers, to identify the types of vaccines in addition to the method of administering them to Kindergarten children and new students after reviewing their vaccination situation.

Immunization: it is a secure preventive method that protects the health of children, since birth, from communicative childhood diseases and their debilitating or fatal repercussions. The immunization program has begun in Iraq in 1985.

Objectives

a- **General objectives:** to reduce through immunization the illness and death rates from targeted diseases.

- To eradicate polio in children.
- To get rid of congenital tetanus and tetanus in mothers.
- To eliminate measles and rubella and to prevent the occurrence of epidemic outbreaks.

b- **Qualitative objectives:**

To vaccinate Kindergarten children and new students in Elementary schools with a booster dose of:

- Quadruple vaccine, oral polio vaccine and mixed measles vaccine. In the event a student is not vaccinated with the first dose of the mixed measles vaccine, this will be deemed as the first dose and the student shall be revaccinated with the second dose of the mixed measles vaccine following a period not less than (30) thirty days from administering the first dose to him.
- (To observe the updatable national schedule).
- To vaccinate the female students of Grade 9, Preparatory schools and High Schools with the tetanus toxoid vaccine.
- To include school and university students in national campaigns and in accordance with epidemic outbreaks.

Types of Vaccines

- 1- Oral children polio vaccine: it is administered to children and new school students in the (4-6) age bracket as a second booster dose at the rate of two drops in the mouth. It contains live and weakened children polio virus.
- 2- The quadruple vaccine (whooping cough, tetanus, diphtheria and type (B) hemophilus catarrhal bacteria):
This vaccine contains the whooping cough bacteria, diphtheria toxoid and tetanus toxoid in addition to the sugar components of the hemophilus catarrhal bacteria which is associated with tetanus toxoid. It is administered in one half cubic centimeter dose in the front distal muscle of the thigh as a second booster dose.

- 3- Mixed measles vaccine: it contains a live weakened measles virus, a weakened rubella virus and a weakened mumps virus. It is administered in one half cubic centimeter dose in the muscle of the left arm or subcutaneously. It is preferable to inject it, after dissolving it in its special solvent, subcutaneously in order to minimize its side effects.
- 4- Young or adult double vaccine containing diphtheria toxoid and tetanus toxoid. It is administered at the rate of one half cubic centimeters by injecting it in the frontal distal muscle of the left thigh. It is administered to children and students who are proven to be afflicted with a vascular trauma or neurological diseases from a previous dose of the quadruple or quintuple vaccines.
- 5- Tetanus toxoid: this vaccine is administered to female students of Middle, Preparatory and High Schools by injecting it in the muscle of the left arm in order to enhance their children's immunity against contracting congenital tetanus.

Vaccine contraindications: refer to the immunization guide.

Work Mechanism

The physician or the health worker shall verify the vaccination situation of the student by scrutinizing the vaccination card. If obtaining the vaccination card proves to be difficult, the immunization records at the health center (permanent register) shall be verified based on family or child number. In the event this also proves to be difficult, the mother's memory shall be relied upon.

Monitoring and Assessment

This is accomplished by extrapolating the coverage rates of Kindergarten children and students from the daily vaccination register based on child or family number. In coordination with the Immunization Unit at the health center, the extrapolation of the coverage rates of the following vaccinations shall be determined as a second booster dose (oral children polio vaccine, quadruple vaccine and the mixed measles vaccine).

Also, the number of female students, who have been vaccinated with the tetanus toxoid vaccine, has been documented according to doses, in addition to the number of those vaccinated during national campaigns for all included academic stages, provided that they are kept in documented registers within the health center.



CHAPTER TEN

Nutrition

Unit Responsible for the Service:

- The Nutrition Unit at the health center (or the health cadres trained on nutrition).
- The School Health Officer at the health center.

Importance of Nutrition

Good balanced nutrition is the basis for human health and well-being. A safe life cannot be without sufficient food and good health cannot be without good nutrition. Balanced food contains all the nutritional elements required for meeting the body's basic needs of building, growth and prevention of diseases. It strives to arm the body with the required energy for performing daily physical or intellectual activities, particularly with respect to student segments representing the stages of childhood, adolescence and youth that are characterized by continuous growth and high activity. Healthy nutrition prevents the affliction of malnutrition diseases such as anemia, vitamin A deficiency and other nutrient deficiencies that negatively impact the student's scientific level as they constitute an impediment to success and excellence.

Advanced nations have realized this fact and have paid particular attention to providing healthy food to their people, especially the categories of children and youth of school age, this in order to prepare a healthy generation that possesses the physical, intellectual and mental health components so as to effectively contribute to building its country and striving for its progress and prosperity.

What Is Food and What Are Its Components

Food: it is every substance that is circulated for the purposes of human consumption such as food in its solid, semi-solid, liquid or gum like forms, drinking water, ice, or any components used in food preparation and which, when consumed, lead to some or all of the following:

- Supply the body with the required energy to carry out various activities.
- Assist body growth and building and the renewal of destroyed cells.
- Regulate activities of the body and protect it from diseases.

Food Components

They constitute every food substance composed of raw material called food elements. They come in two types:

- Large food elements: they are relatively large elements measured in grams or kilograms. They are called large elements because the body's requirement thereof is in large quantities such as carbohydrates (starches or sugars), proteins (albumins), fats and water.
- Minute food elements: they are relatively small elements that are measured in milligrams or micrograms and the body's requirement thereof is in small or very small quantities, but they are very significant for the completion of vital activities that occur inside the body such as vitamins, minerals and salts.

Balanced Food

It is the diversified food that contains the required food elements (large and minute) which secure man's need for the required energy to carry out various activities. The percentages of balanced food as an energy source are as follows:

- Carbohydrates 50-60% of the total energy need.
- Proteins 15-20% of the total energy need.

- Fats 25-30% of the total energy need.
- Sufficient quantities of vitamins, salts and minerals as required.

Types of Large Food Elements

1. Proteins

They are organic compounds of complex composition consisting of carbon, hydrogen, oxygen and nitrogen with some of them containing sulfur and phosphorus.

- Proteins are of great importance to the human body as they are involved in building various muscles and tissues in the body and strive to form antibodies for resisting various diseases. They are also involved in building yeasts, hormones and mucous membranes and they enter in the composition of milk in nursing mothers.
- The protein deficiency in human food leads to weight loss, rapid fatigue and a reduction in the body's resistance to diseases. In case of children, it leads to growth delay and a high affliction of communicable diseases. In cases of severe deficiency, the patient complains of swelling feet, emaciation or what is called kwashiorkor.
- Red meat (beef and mutton), white meat (poultry and fish), eggs and milk are among the most significant animal protein sources. There are also vegetable protein sources such as legumes, wheat, rice, corn and oatmeal, but in small quantities.
- Animal source proteins are richer and more useful than vegetable proteins as they contain basic amino acids.

2. Carbohydrates (Starches or Sugars)

They are organic compounds consisting of carbon, hydrogen and oxygen.

Importance of Carbohydrates

- They are deemed as the main source of energy.
- They are necessary for carrying out the various functions of bodily tissues.
- Lactose (milk sugar) is deemed as a factor aiding the growth of useful bacteria in the digestive system.
- Vegetable fibers available in carbohydrates (cellulose) are useful for the functioning of the digestive system and controlling chronic constipation due to the activation of the intestinal movement.

3. Lipids

They are organic compounds consisting of primary substances, namely carbon, oxygen and hydrogen but in different ratios than those present in carbohydrates.

Lipids consist of building units called fatty acids.

Types of Lipids

- Fats: they are a type of lipids that are often solid at room temperature and contain saturated acids (with hydrogen atoms). They are available in cattle and poultry meat and dairy products. These types of fats are considered harmful to the human health and one of the main reasons for heart and artery diseases.
- Oils: they are another type of lipids that are often liquid at room temperature as they contain unsaturated fatty acids. They are of two types:
 - Oils with multiple unsaturated fatty acids: they are present in corn and sunflower oils, also in fish oil, particularly whale oil. These oils are deemed important as they do not raise the rate of dangerous lipids in the blood.
 - Oils with mono-unsaturated fatty acids: they are present in vegetable products such as olive oil and peanut oil. They are among the best types of oils and the most useful for man as they reduce harmful fats in the body.

Reasons for lipid increase in the blood

- Genetic causes: some families have a genetic disposition to fat increase in the blood.

- Obesity.
- Affliction with some diseases such as diabetes, renal failure and thyroid deficiency.
- Lack of physical activity.

4. Water

Water Functions:

- Water is considered a suitable solvent for most large and minute nutrients, also for waste resulting from metabolic activities in the body as it helps to dispose of it outside the cell and the body.
- It has an effective role in digestion, absorption and circulation processes.
- It helps the water dissolution of food elements in the cell and renders it ready for assimilation.
- It cools the body and maintains its temperature through sweating,
- It lessens the friction in joints between bones and cartilages.
- It supplies the body with some minerals and salts and according to its sources.

Minute food elements:- they comprise vitamins and mineral salts.

1. **Vitamins:** they are a group of organic compounds that are different in chemical composition and have very important functions in completing the various interactions that take place inside the body. They are of two types, with one type dissolving in water and called water soluble vitamins such as vitamin C and vitamin B group. The other type dissolves in fats and is called fat soluble vitamins such as A, D, E and K vitamins.

1- Fat Soluble Vitamins

Vitamin A

- Vitamin A is present in nature in two forms, either in the form of (retinol) which is mostly available in animal sources or in the form of carotene whereby it is available in vegetable sources.
- Vitamin A is considered among the most important minute nutrients for the human body for the following reasons:
 - It enters in the composition of light spots for the eye and its deficiency leads to poor eyesight and may lead to blindness in case of severe deficiency for long periods.
 - It has a basic role in bodily growth.
 - It is useful for bones and teeth.
 - It is important in the cell specialization process at the fetal stage.
 - It is very significant in building the body's immune system.

Symptoms of Vitamin A Deficiency

- Degenerative changes in the eye inclusive of all the parts of the eye with nyctalopia which may lead to total blindness.
- Delay in growth.
- Weakness in body immunity, particularly in children, thus exposing them to recurrent infections in the respiratory system and the digestive system.
- Skin infections with keratoderma.
- Vitamin A deficiency in a pregnant mother may lead to congenital deformities in newborns or to an increase in death rate.
- Vitamin A deficiency in a nursing mother may lead to a deficiency in this vitamin in children.
- Deficiency and deformity in bone and teeth growth.

Vitamin A Sources

- Animal sources: meat, liver, kidney, milk and its products and eggs.
- Vegetable sources: carrots, spinach, legumes, corn, tomatoes and cabbage.

There is a national program applicable at the Ministry of Health for administering specific doses of vitamin A according to age and which are administered with routine vaccines to children and in additional doses to nursing mothers in order to prevent vitamin A deficiency diseases.

Vitamin D

- Vitamin D is important for the growth and health of bones and teeth as it helps to regulate the rate of calcium in the blood.
- The deficiency of this vitamin leads to rickets in children and osteoporosis in adults.
- The daily vitamin D requirement is 5 micrograms/day (200 international units).
- Vitamin D is present in milk and its products, eggs and fish liver oil. Also, sunlight is of great importance in the production of vitamin D.

Vitamin E

- Vitamin E works as an antioxidant in the presence of vitamin C.
- It prevents red blood corpuscles from breaking in newborns and it strengthens the immunity system.
- The daily requirement is 15 mg.
- Among the most important vitamin E sources are vegetable oils in general (corn, soya beans) and nuts such as almonds and pecans.

Vitamin K

- Among its most significant functions is its helping the coagulation of blood when hemorrhaging.
- The sources of this vitamin are meat, liver, milk and its products, eggs, fruit and dark leaf vegetables such as spinach and cabbage.

b. Water Soluble Vitamins

Vitamin C

Among the symptoms of vitamin C deficiency is gum bleeding and the hemorrhaging in the joints, cracks in hands and legs and wounds not healing with aches in joints and bones that break easily and the occurrence of psychological disorders such as depression. The patient also complains of weakness and fatigue.

The most important sources containing vitamin C are citric fruits, green peppers, tomatoes and dark leaf vegetables.

B Vitamin (B1, B2, B3, B6 and B12) Group

- B1 vitamin (thiamine): its deficiency leads to the affliction with a set of symptoms called the beriberi disease.
- B2 vitamin (riboflavin): its deficiency leads to tongue inflammation with ulcerations at the corners of the mouth and the lips.
- B3 vitamin (niacin): its deficiency leads to a disease called pellagra that is characterized by skin inflammation with cracks and diarrhea with neurological and psychological symptoms.
- B6 vitamin (pyridoxine): its deficiency leads to symptoms in the nervous system.
- B12 vitamin (cobalamin): its deficiency leads to blood anemia, tongue inflammation and symptoms in the nervous system.

2. Salts and Minerals:

They are among the minute nutrients and they play a basic role in the metabolic activities that take place inside the body and comprise: iron, iodine, zinc, calcium, phosphorus, sodium, potassium and numerous other minerals. We will explain some medical conditions resulting from the deficiency in some salts and minerals in view of their utmost importance to the general health and the spread of its extensive impact among school age children and youth segments.

a. Iron:

- Iron deficiency leads to blood food anemia which is among the most widespread nutritional deficiency diseases, particularly among children, adolescents and youth of both genders.
- Iron deficiency leads to a deficiency in the hemoglobin substance in the blood which in turn leads to a deficiency in the quantity of oxygen which is considered the most important and necessary element for the vital cells to function.

The rate of normal hemoglobin values in the blood is as follows:

Males	13-15 grams / deciliter
Females	11.5 – 14 grams / deciliter

Causes of Blood Food Anemia:

- Low intake of nutritional substances rich in iron for several reasons, most importantly poverty and ignorance.
- The presence of impediments to the iron absorption process from the intestines such as diseases of the digestive system, wrong nutritional habits, affliction with intestinal worms or others.
- The increased need for additional quantities of iron due to rapid growth processes as in children and adolescents, especially girls.
- The presence of a deficiency in other nutritional elements that participate in the formation of blood such as proteins, folic acid, vitamin C and vitamin B12.
- Continuous loss of blood due to some diseases such as stomach ulcer, bleeding duodenum, intestinal worms or increased menstruation in girls.

Effect of Blood Food Anemia

- It affects the child's or the patient's learning ability and academic performance.
- It affects bodily growth.
- It decreases the immunity against inflammatory diseases.
- It leads to paleness of the skin and the eyes, loss of appetite with a feeling of fatigue and lethargy, headache, vertigo, palpitations and inflammation of the corners of the mouth.
- Blood anemia has a great economic impact due to the negative effect it causes to physical and intellectual activity.

Nutritional Treatment of Blood Anemia

- Large quantity intake of food containing iron such as red meat, liver, eggs and legumes.
- Intake of food rich in vitamin (C) as it increases the absorption of iron.
- To avoid food that affects the absorption of iron such as tea and coffee, particularly when drinking them immediately after eating.
- To teach children early on healthy habits and behavior such as washing hands, eating food with high nutritional value and avoiding food with low nutritional value such as sweets, chips and soda beverages.
- Flour, supplemented with iron, and folic acid are important for minimizing blood anemia at the community level.
- To take the appropriate medical treatment.

b. Iodine:

Iodine is among the important elements in human life as its impact begins from the fetal period and continues throughout all life stages. It carries out the following functions:

- It is in the composition of thyroxine hormone that is secreted by the thyroid gland. This hormone plays a fundamental role in controlling the metabolic activities that take place within the body, energy production and the consumption of oxygen by the cells.
- It has a great impact on bodily growth and motor development.
- It is very essential for the growth of the brain and the nerves of fetuses and newborns.

- It is quite significant for psychological and mental health.

Disorders Resulting from Iodine Deficiency:

- Feeling of fatigue and stress.
- Enlargement of the thyroid gland (goiter).
- Delay in growth.
- Reduction in the level of intelligence and the ability to learn.
- Congenital deformities in newborns from mothers afflicted with iodine deficiency such as stunting, deafness, muteness and mental retardation.

Iodine Deficiency Disorder Prevention Methods

- Intake of salt supplemented with iodine.
- Higher intake of fish and seafood.

c. Zinc

Zinc deficiency leads to:

- Delay in bodily and sexual growth.
- Deficiency in immunity against communicative diseases.
- Skin inflammation at the corners of the mouth with a skin rash.
- Chronic diarrhea.
- Alopecia disease (falling hair).
- Mental and neurological diseases.

d. Calcium

Functions of calcium:

- It grants sufficient hardness to the human structure and teeth.
- It is an auxiliary factor in the blood coagulation process.
- It is an auxiliary factor in making some enzymes such as lipase enzyme.
- It contributes to the transmission of cell control instructions to the muscles and the nerves.

Calcium Deficiency Symptoms:

- Stunting and incomplete growth and hardness of the bones.
- Rickets in children.
- Bone decay and osteoporosis in adults.
- Weakness in the bone and nerve system.
- Dysfunction of some metabolic interactions inside the body.

Wrong Eating Habits:

The community suffers from numerous wrong eating habits which cause several health and nutritional problems. Among these habits:

1. Not eating breakfast, especially with respect to children despite the importance of this meal as it is the main meal of the day and is followed by work and studies, or not caring for it as a main meal and replacing it with small quantities of food that is poor in important nutrients thus leading to rapid fatigue and exertion without the student understanding the academic subject and sleeping in the classroom.
2. Large intake of soda beverages. The danger of those beverages lies in their containing large quantities of sugars and acids such as phosphoric acid which causes teeth and bone decay and erosion. Moreover, drinking soda beverages with food leads to deactivating the role of the digestive enzymes which the stomach secretes thus causing an increase in stomach acidity and indigestion. Also, the caffeine and tannin substances which the soda beverages contain cause

palpitations, an increase in blood pressure, liver cirrhosis and osteoporosis with a deficiency in calcium and iron. Some kinds of these beverages (diet) contain substitute industrial sweeteners such as aspartame and saccharine which are harmful for the brain and the nervous system and may lead to gradual memory loss with extensive intake. These soda beverages are rich in sugars and are considered among the main causes of obesity and they lack the useful and basic food elements.

3. Drinking tea and coffee with lunch or immediately after it leads to a decrease in the absorption of iron thus causing blood food anemia. It is recommended to have coffee and tea two hours after eating. It is also preferable to drink fruit juice that contains vitamin C which helps to absorb the iron present in food.
4. Large intake of fried and heavy food containing animal lipids, particularly with respect to the elderly. It is preferable to substitute them with mono-unsaturated vegetable oils such as olive oil. Moreover, frying oil must not be used for several times because it leads to the destruction of vitamins, the saturation of oils and their oxidation and the formation of harmful compounds.
5. Large intake of fast ready meals such as (hamburgers and sausage) as these types of food are high in calories with limited nutritional value and may lead to indigestion, obesity and heart and artery diseases.
6. To focus on some types of food rather than others such as (meat and lipids) and not to eat other kinds such as fresh vegetables and fruits which are considered the main source of necessary vitamins and mineral elements for the health. Food is supposed to be balanced, diversified and containing all the food elements.
7. Large intake of chips, appetizers, sweets and ice cream, particularly by children, youth and even adults, as these substances lead to what is called (false fullness) because they are rich in calories and lacking in important food elements. They often lead to malnutrition diseases.
8. Following a wrong method when eating, such as eating quickly while standing, in which case the nervous system is stressed and causes muscle spasms in the esophagus with a disorder in the function of the digestive system.
9. Using large quantities of additives in food such as salt, spices, pickles and the like which cause high blood pressure and flaring of the lining of the esophagus and the stomach and may lead to increased acidity and ulcer.

Nutritional Condition Evaluation

It is the process of measuring the nutritional health of a person in order to increase his awareness of his current general health in the long term, to determine the diseases of nutritional origin and to treat or to prevent them. This is performed by taking the following actions:-

1. Body measurements
2. Laboratory examinations
3. Clinical evaluation
4. Calculation of the quantity of food eaten

1. Bodily Measurements: they are physical measurements of body weight, dimensions and structure whereby they contribute to creating a broader image of the nutritional health condition.

Its Benefits

- Nutritional evaluation: to determine the food deficiency, obesity and stunting and to monitor the growth of the child
- Calculation of medication doses
- Nutritional treatment forms

This method comprises:

- Measurement of weight, height, age and other indexes such as arm circumference and skin fold thickness

- It requires measurement tools such as electronic scale, height measurement boards, arm circumference measurement tape and skin fold thickness measurement machine
- The work requires sufficient skills (training)
- It requires standard tables for comparison and determination of the condition

Body mass index is a measurement that is used to indicate excess weight and obesity, also to indicate low weight and thinness

- Depends on weight and height
- Body mass index = body weight (kg/squared height in meters (m)²). The results are read as follows:
 - Less than 18.5 means low weight
 - 18.5-24.9 normal weight
 - 25-29.9 excess weight
 - 30 or more obesity

2. Laboratory examinations: they are used to measure

- The concentration of a nutrient in the blood such as vitamin A, iron
- Urine test to measure the iodine rate
- To measure incidental metabolic products from the substance.

Laboratory examinations include an examination of blood, urine and tissues. These examinations are characterized by:

- The most accurate measurements
- Require trained persons
- Are costly
- Analysis completion takes time

3. Clinical Evaluation:

It depends on the presence of clinical signs for malnutrition diseases such as:

- Skin: hardening of the skin, appearance of spots, pale color and falling or breaking hair
- Mouth: swelling of the gum, rapid bleeding, cracking of the corners of the mouth, peeling lips and teeth decay
- Limbs: swelling of the lower limbs (edema)
- Liver enlargement
- Bending bones especially the lower limbs
- Enlargement of the thyroid gland
- Poor eyesight or nyctalopia
- Mental retardation
- Exposure to malnutrition disorders for a long time will exhibit signs and symptoms
- Clinical signs are qualitative signs that depend on the examining physician (practical and scientific experience)
- There are undetermined signs for a specific disease such as edema (swelling) present in several other diseases such as kidney and heart diseases.

The Role of School Health Services in Nutrition

1. To examine and to treat students who complain of malnutrition symptoms and signs such as: blood food anemia, obesity, emaciation, stunting, poor eyesight conditions, nyctalopia, enlargement of the thyroid gland, various skin conditions or numerous other symptoms and signs in primary health care centers.
2. To send the cases requiring accurate laboratory examinations or specialized medical procedures in order to get the required treatment.

3. To educate and to train school administrations, academic cadres and academic supervisors on monitoring malnutrition cases among students, to emphasize the importance of the early detection of these cases **and to refer the malnutrition cases to the health center in order to take the required actions in their regard.**
4. To train school administrations and academic cadres to take bodily measurements (weight and height with respect to age) of students in order to diagnose malnutrition diseases such as stunting, obesity, excess weight or thinness and to refer them to the Nutrition Units at the primary health care centers in order to receive the required treatment.
5. **The class advisor shall enter the bodily measurements (weight, height) in the (school card) and continue to measure them periodically at the rate of twice a year in order to monitor normal growth and to enter any symptoms or signs of malnutrition diseases that are present during the examination or that may appear in the future.**
6. To visit Kindergarten children and schools of various levels at the rate of two visits during one academic year in order to monitor the cases of malnutrition diseases among students and to take the required actions in their regard.
7. To supervise the health and academic cadres educating and enlightening the students and their parents as to the importance of healthy nutrition and its relationship to the general health and the necessity of avoiding wrong eating habits, this through meetings and lectures to parent teacher associations and to follow up these activities.
8. To coordinate with the civil community organizations and the municipal councils the awareness and education campaigns as to malnutrition diseases and their danger to all the segments of society, particularly the student segment, in view of the negative impact it has on the physical, psychological and mental health.
9. The health and education sectors shall coordinate, collaborate and maintain communication in order to overcome the problems or impediments that may appear in the execution of the school health services program in the area of nutrition.



أخي المعلم...

إنصح أبنائك الطلاب بتناول الأغذية المسلقة ومياه الشرب المعبأة.

وزارة الصحة
دائرة الصحة العامة (قسم الرقابة الصحية 2013)



CHAPTER ELEVEN

The Role of Health Awareness in Supporting School Health Services

Officers responsible for providing health awareness in the area of school health

- **Immediate Officer:** the staff member working at the Health Enhancement Unit.
- **(Indirect) Officer:** all the cadres working at the primary health care center.
- **Coordinator:** School Health Officer.

This chapter aims

To support the abilities of the staff member working at the Health Enhancement Unit in particular and the remaining units in general by introducing them to the main tasks and the work mechanism in order to offer health awareness and education services that enhance school health services.

Health Enhancement Unit

It is one of the primary health care centers that is responsible for the awareness tasks about various health topics and to various segments of society, this in coordination with the remaining center units and their formations among which (the school health team) and the concerned governmental and non-governmental authorities, ending with health enhancement. The targeted categories here are:

1. Primary targeted category: the student segment.
2. Secondary targeted category: the academic segment, the family and the remaining care center cadres.
3. Supporting categories: governmental departments, civil community organizations, clergy and regional dignitaries within the geographic location of the primary health care center.

Tasks within the Unit

Education + distribution of awareness material comprising important health messages

1. To receive the students referred from medical units (alone or with their families) and to offer awareness and education about the health problem of which the student suffers (Annex 1).
2. To offer awareness to all the families visiting the unit as to:
 - The importance of examining new students in the early detection of diseases and the assessment of their health condition (Annex 2).
 - The importance of proceeding on a compulsory leave in the event their children are afflicted with one of the communicative diseases covered by this type of leave (Annex 2).
 - The importance of completing the vaccines to Kindergarten age children (Annex 2).
3. To prepare the awareness requirements (health message, folder, circular) or any media material pertinent to one of the health topics concerning the health of the students and which the center resources produce (Annex 1).

Tasks within the Center

1. To effectively participate as a member in the school health team in the execution of awareness activities in coordination with the remaining team members and within the determined tasks of the team (Annex 3).
(Refer to the school health team tasks in the guide)
2. To coordinate with the school health team that one of the weekly lectures shall be designated for evaluating the awareness and education activities supporting the school health services within the center (Annex 1).

3. To coordinate with the Health Enhancement Branch in order to enhance the communication skills of the health workers in offering school health services at the health care center and with the health coordinators in schools by offering lectures on the subject (Annex 4).
4. To participate in the preparation of the awareness requirements necessary for the execution of supporting activities in order to celebrate the health occasions that are held in schools (School Health Day, the Universal Day for Washing Hands, the Regional Week for Immunization and others) (Annex 1).
5. To monitor the cases and priority health problems which concern the student segment within the geographic location of the center in order to focus the awareness efforts on them (Annex 1).

Tasks outside the Center:

Education + distribution of awareness material comprising important health messages

1. To participate in the school health team awareness activities in schools (parent teacher associations, seminars or lectures to students and the academic segment, and celebrations) and in the execution of semester seminars in governmental and non-governmental facilities within the geographic location (Annex 1), (Annex 3).
2. To coordinate with the members of the local committee the health awareness and education at the center (Health Enhancement Unit Officer, Municipal Council Member, Health Coordinator, clergy, media person) through periodic meetings to offer the required support to schools, each according to the governmental and community service for which they are responsible (Annex 1).

Monitoring and Evaluation

1. **Monitoring:**
 - To document the activities (individual meetings, weekly lectures and semester seminars).
 - To prepare the produced awareness material.
2. **Central Evaluation:**
 - Through supervisory visits and monthly statistics.
 - KAP studies in order to evaluate the knowledge, attitudes and practices of the targeted categories toward various health topics.





CHAPTER TWELVE

School Psychological Health Care

The unit responsible for providing the service:

- **Psychological Health Care Unit at the health center.**
- **Coordinator. School Health Officer.**

Objective:

To offer good psychological health care services that help to secure a sound psychological and social growth for the students (beneficiaries). School psychological care is offered collaboratively and complementarily between the Psychological Health Unit and the School Health Officer at the health center and in coordination with the managers and academic supervisors in schools or their deputies within the geographic location. The services comprise the following:

- 1- To examine the new students in order to ascertain their sound psychological and neurological condition and their physical well-being as required for healthy psychological growth (eyesight, hearing, speech, eye communication, responses, size of body and head, head and body movement coordination).
- 2- To examine the students referred from school administrations due to psychological or behavioral problems and to treat them, if possible, while referring those required among them to the Psychological and Social Services Office for examination, diagnosis and treatment purposes.
- 3- To follow up the schools and to verify the provision of adequate conditions for education and sound psychological growth of students so as to secure the students attainment of the highest possible level of intelligence for each of them and acquiring and developing the psychological and social skills in order to become productive members in society (adequate environment, available athletic, artistic, literary, skill and social extracurricular activities in addition to the presence of communication among the educational establishments, the students and their parents, not following violent methods and demeaning punishment, the observance by teacher and school administrations of good conduct as a role model for students).
- 4- To activate the role of the Academic Counselor in schools as he constitutes the first and most important interaction with problem students for resolving their problems in collaboration with their parents and referring to the health center those requiring diagnosis and treatment.
- 5- To carry out awareness and training activities for educational establishments and the parents of the beneficiaries at the rate of one monthly seminar for the educational establishments and one monthly seminar for the parents of the beneficiaries.

CHAPTER THIRTEEN

Health Monitoring Plan in School Health

Targeted Category

All the governmental and public educational establishments (Kindergartens, Elementary, Middle, Preparatory and High Schools), universities, institutes (boarding divisions and cafeterias), State homes and Special Needs Institutions (of school age) included in the school health plan.

Targeted Stage

All school stages.

Academic Semester of Activity Execution

Throughout the academic year.

List of Rendered Services

1. To inspect the safety of drinking water in water tanks and water supply, to draw samples from them and to send them to approved laboratories in order to learn their suitability for human consumption.
2. To measure the rate of free chlorine remaining in water.
3. To inspect school canteens comprising the following:
 - a- To assign an appropriate place for selling healthy food and sulphonated food (exclusively) produced by officially licensed factories and subject to imported and local health monitoring.
 - b- To commission a contractor with the sales for this purpose and to exempt the academic cadre and cleaning workers from the same.
 - c- The workers shall obtain medical examination cards and health education certificates.
 - d- To conduct a physical and sensory examination of the sold items while taking immediate actions (on site disposal) or drawing specimens thereof in case of suspicion or complaint and to send them to approved laboratories in order to detect their suitability for human consumption.
4. To ascertain the periodic examination of workers in schools, particularly in school canteens.
5. To open a special register for visits to every academic establishment (to be deleted from the environmental form).
6. To follow up the production and expiry dates of displayed food.
7. To follow up the provision of healthy conditions to school canteens and restaurants in colleges and institutes by the Health Monitoring Branches in the primary health care sectors.
8. To take punitive actions vis-à-vis **school canteen owners** and contractors in institutes and colleges violating the health conditions in accordance with Article 96 of the Public Health Law No. (89) of 1981 and its amendments inclusive of closure or a penalty or both. In the event of repeated violations, they shall be referred to the competent court in accordance with Article 99 of the above law.
9. To follow up street vendors near schools by the Health Monitoring Branches in the sectors. The health center shall notify the concerned authorities of all the information pertinent to school vendors.
10. To monitor and to follow up health and environmental hazards and to approach the concerned authorities for their avoidance.
11. To follow up the environmental sanitation within the school (**refer to the annex**) in terms of providing potable water in addition to caring for the cleanliness of drinking water tanks, also caring for the cleanliness of sanitation facilities and using disinfectants and sterilizers.

Training on Efficiency Procedure or Service

To train the supervisory cadres responsible for the health monitoring plan in schools, within the Health Monitoring Branches in the sectors.

Executing Authority in the Sector

Health Monitoring Branches in the sectors

Executing Authority at the Health Center

Preventive Assistant at the health center

Coordinative Authority at the Health Center (School Health Officer)

School Health Officer

Follow-up Method and Activity Execution by the Health Department (Field Visit Statistics ... etc.)

Periodic visit to schools, entering the situations and statistics and sending them to the Health Monitoring Division with the Monthly Statistics Consolidator for the purpose of following up and addressing the Education Directorates in the governorates with the environmental situations of the academic establishments and the Special Needs Care Division in the governorates.

Follow-up Method and Activity Execution by the Division, the Branch or the Program at the Ministry

Through the statistics incoming from the Monitoring Branches at the Public Health Division in the governorates, the field visits of the Division teams to the governorates and school visits of which copies shall be sent to the School Health Units.

School Environment Annex

The importance of school health services is common knowledge. The Public Health Law No. 89 of 1981 and its amendments – Part Two refers to school health services in Articles (9 – 10 – 11 – 12 – 13) in view of the great impact of these services on preparing the appropriate school environment and making the school attractive for students.

School Building and Location

The school building must be according to a modern engineering design that observes the World Health Organization standards of school construction while taking into consideration the environmental determinants and the proximity to residential areas (**specifications to be mentioned**).

a. Area:

It shall be commensurate with the numbers of anticipated students in the residential area and not less than 10-15 meters of total area for each student. The area of every classroom must be no less than $6 \times 8 \text{m}^2$ so that the area for every student is $1-1.5 \text{m}^2$ per classroom with a height of 4 meters. Heating, cooling and healthy ventilation shall be provided for every classroom and the height of the external fence shall be no less than 180 cm. The school area shall be commensurate with the student numbers with an area of 2m^2 per student.

b. School Canteen:

- To provide a room of an appropriate area and provided with good ventilation, heating and cooling. It shall contain an electrical refrigerator for preserving sulfonated food, beverages and juices canned by officially licensed factories with manufacture and expiry dates on them. Baskets or barrels with lids must be provided near the canteen.

- The person or persons responsible for the school canteen shall officially not be working at the school and each of them must obtain the medical examination card and the health education certificate, this with respect to Elementary, Middle and Preparatory schools.
- The restaurants in colleges, institutes and State homes shall be governed by the Health Monitoring Branches, each according to its geographic location. They shall be dealt with according to the Public Health Law No. 89 of 1981 and its amendments through organized visits by the health teams.

c. Sanitation Facilities:

A sanitation facility must be provided for every 25 students. The sanitation facilities shall contain the following:

- A continuous water supply or tank.
- A cleaning siphon for every sanitation facility.
- An air extractor for every sanitation facility.
- Waste baskets.
- The provision of a number of sinks commensurate with the numbers of sanitation facilities and which shall be securely connected to the pipes. Washing soap must be provided daily.
- The daily use of disinfectants in sanitation facilities.

d. The Environmental Aspect at School:

(A healthy environment embodies the safety of air, water and soil)

- Air safety: it was mentioned within the school's modern engineering design which takes into consideration the location of the school being away from factories, noise areas and sanitary dumping areas.
- The school must be provided with a continuous water supply while securing the provision of modern non-corrosive tanks in sufficient numbers so as to supply every student with (10 gallons daily). It must be clean and with a lid with the rate of chlorine therein not less than 0.5 parts per million upon its examination by the preventive or health cadres on school visits.
- A drinking water compound must be made available to students with good quality inverted faucets guaranteeing not transmitting diseases upon their use. The pipes shall be tightly connected to the main sewage network.
- Well-paved halls and yards must be made available without the possibility of sliding thus guaranteeing the safety of children from falling accidents. The yards and halls must be provided with tightly secured pipes for the disposal of rainwater.
- The school garden must be landscaped, under the supervision of (a gardener) and always clean, thus embellishing the school environment.
- Waste baskets must be provided in school halls and near the school canteen in order to teach the students to observe the cleanliness of the school environment.

Kindergarten Environmental Specifications (**refer to annex ...**)

Boarding Divisions of Students in Iraqi Colleges and Institutes

Environmental Specifications of Boarding Divisions and Institutes (Refer to the Annex ...)

- 1- Bedrooms: the area of the beds therein must be 5m per bed in one room.
- 2- Provision of heating and cooling in the divisions.
- 3- Provision of bathrooms and sanitation facilities comprising all the required health conditions and in numbers that are adequate for the occupants of the student boarding division.
- 4- Provision of conditions pertaining to restaurants.

- 5- The provision of health conditions shall be followed up by the health monitoring team and reports to this effect must be prepared on the reality of health at the boarding division. The Ministry of Higher Education and Scientific Research shall be addressed in this regard.

Staff Health

The staff working in the provision of school services, other than the faculty, is in direct contact with the students and the academic cadres. Thus, it is imperative to ensure their lack of communicative diseases along with the necessity of educating them as to their participation in the health awareness courses that are held at the Health Monitoring Branches in the primary health care sectors. Consequently, the following annual examinations are conducted to them:-

- The acquisition of the medical examination card that is renewed every year.
- The acquisition of the health education certificate that is renewed every two years.
- The necessity of continuous health awareness of staff by the health teams visiting the schools through emphasizing the importance of personal hygiene, wearing aprons and gloves and caring for the cleanliness of the school canteen and the school in general. The health teams shall distribute circulars and folders aiming to stimulate health awareness.

Role of the State

The environmental specifications of State boarding homes and Special Needs Institutes (refer to Annex ...)

The building of the boarding institute, classrooms, halls, bathroom services and the sanitary facilities therein shall be according to the World Health Organization standards pertinent to the handicapped and the special needs, in addition to the provision of the health and environmental conditions in regular schools.

Mechanism, Monitoring and Evaluation

The School Health Officer at the primary health care center shall coordinate with the Health Monitoring Branch in the sector with respect to the execution of the plan and the preparation of the required statistics in the school file and statistics that are sent to the Health Department.



CHAPTER FOURTEEN

Authorities Responsible for Handicap Diagnosis at the Ministry of Labor and Social Affairs

First / Handicap Diagnosis Center (in Baghdad)

It is one of the Special Needs Care Departments and its most crucial tasks are:

- To receive the children referred by health centers or Private Education Committees in Baghdad or directly by the children's parents or the educational institutes.
- To examine the handicapped, to diagnose their handicap and to refer them to the educational institutes according to the type and severity of handicap.
- To refer the cases to the other health authorities for purposes of examination and diagnosis when required (psychological cases) or composite handicaps, particularly autism accompanied with mental retardation or epilepsy.
- To reexamine and diagnose the case when the initial diagnosis is questionable.

Second / Medical Committees in Governorates

They receive the children referred by health centers. The type of handicap is diagnosed and they are referred to institutes accordingly. The Special Needs Care Division in the governorate shall refer the handicapped to the Medical Committee in the governorate for examination and diagnosis purposes in the event the child's parents check directly with the division (the said division refers at times the case to the Handicap Diagnosis Center in Baghdad for examination and diagnosis). The center receives all types of cases that suffer from handicaps, especially mental, psychological, bodily and physical handicaps for examination and diagnosis purposes. As to the referral mechanism, it is as follows:-

- The citizen submits a request for the purpose of examination and diagnosis, to determine his handicap and to provide him with the required report.
- To examine the handicapped and to refer them to the educational institutes according to the type and degree of handicap.

Educational Institutes for the Handicapped (Non-boarding)

Included in school health services at the locations of the institutes.

First / Mental Handicap Institutes (Al-Rajaa Institutes).

They receive those afflicted with mental handicaps such as simple and moderate mental retardation (learning disorder) among whom those suffering from Down syndrome and autistic children. The beneficiary receives an education at these institutes in accordance with the special curricula prepared by the Mental Handicap Division at the Special Needs Care Department.

Second / Physical Handicap Institutes

- 1- Institutes for the Deaf (Al-Amal Institutes).
They receive children who are deaf or with poor hearing and speech from the age of 4 years up to the age of 9 and they teach them according to the curricula of the Ministry of Education.
- 2- Institutes for the Blind (Al-Nour Institutes).
They receive children who are blind or with poor eyesight from the age of 6 years and they are taught according to the curricula of the Ministry of Education. The beneficiary is granted the Elementary stage certificate and is subsequently transferred to the Middle stage which he shall complete at the Ministry of Education schools.
- 3- Institutes for the Physically Handicapped

They receive the physically handicapped who are taught according to the Ministry of Education curricula for the Elementary and Middle schools. They may subsequently pursue their studies at the Ministry of Education schools.

State Homes (for school age orphans) (boarding homes)

They receive orphaned children (from the age of one day to 18 years) and are included in the school health services and program through academic establishments.

Health Services

There are health coordinators at State homes, in addition to physicians and health cadres assigned by health centers. Various health services are offered in coordination with the health centers and the hospitals and have reached the level of major operations.

As to the Institutes for the Handicapped, the Social Work Office at the institute coordinates and follows up with the health authorities in order to offer health services to the beneficiaries and to follow up the environmental lists of the institute.

The services are offered by the school health team or specialized physicians, as the case may be.

The social worker and the health coordinator follow up the health records of the beneficiaries.

CHAPTER FIFTEEN

The Role of Education in School Health

Most Important Duties Carried out by the Teacher in Support of the Health Aspect

To use modern academic methods in his dealings with students and which are based on love, tolerance, familiarity and avoidance of coercive and violent methods and reprimand.

To provide psychological security to students thus enabling them to grow and to communicate.

To actively contribute to the local community in holding awareness seminars on health, general and personal hygiene and the conservation of the environment.

To follow up the cleanliness and validity of the sources supplying the students with drinking water.

To cooperate with the Academic Counselor and the family in the resolution of all health and psychological problems from which students suffer.

To cooperate with the school administration, provided that the classroom is well lit and ventilated.

To follow up the health condition of the students and to detect early the medical cases they encounter in order to refer them to health centers for treatment.

To maintain the cleanliness of the school environment and to direct the students accordingly in order to render it a healthy and safe environment.

To support and to follow up the work of school committees (such as the Cleanliness Committee, the Sports Committee) and to encourage the students to enroll in them.

To follow up the general hygiene of the students and to collaborate with the families in order to follow up their children's hygiene.

To care for the cleanliness of the school canteen and to supervise the food sold therein.

To participate in training and developmental courses pertinent to health and psychological aspects and human rights courses.

The teacher must have an impressive personality for the students and he must care about his hygiene and dress in order to set an example.

Duties of the Academic Supervisor in the Area of Health

Academic supervision plays an important and large role in the progress and development of the academic process. It senses the dilemmas and problems prior to their occurrence and attempts to tackle them while benefitting and acquiring skills following their resolution.

The academic supervision has a set of duties of which some are academic while others pertain to counseling and health guidance in the following manner:-

First: To find a teacher specialized in sports, science or arts as a health coordinator at the school so he may be the liaison between school and school health on one hand and between the school and the rest of the community on the other hand. He shall be qualified to follow up the following:

To detect and to observe the conditions that impact the academic performance, such as caring for special needs students, coordinating with the health center's physicians and following up their cases such as (poor eyesight – or hearing – slow speech – epilepsy – diabetes – asthma).

Daily observation among the students of any case of communicable – infectious diseases, early detection and referral.

To determine the appropriate time for checking with the Health Unit, the health cases which must be referred, the critical cases that necessitate immediate transfer to hospital emergency and the simple first aid cases.

The medical cases which can be referred to the health centers such as:

Acute influenza.

Recurrent diarrhea.
Circulating anemia.
Skin, eyes, nose and ear.

- Second:** To spread health awareness and general health education, to instill and to practice sound healthy behavior, to encourage school administrations and their academic cadres to spread health awareness among students and to encourage the provision of posters that portray medical cases and their treatment.
- Third:** To coordinate with the school health team visiting the school in order to learn in a scientific and practical manner the school health activities, even if once during the academic year, and to any school and to coordinate between the school and the health team.
- Fourth:** To participate in parent teacher associations .. and to seize the opportunity of the presence of parents to tackle topics pertaining to negative aspects that are impacting the health of the students such as smoking, drugs, eating exposed food and drinking unhealthy beverages and demonstrating their effects on the deterioration of their children.
- Fifth:** To encourage the school administration to maintain the cleanliness of the school environment, to provide health services, potable water and the cleanliness of the sanitary facilities, to provide the necessary requirements for cleaning and the medical requirements for first aid, to follow up and to evaluate the school, to hold contests and to offer appreciation awards to the schools that provide a healthy and clean environment.
- Sixth:** To direct the health coordinator at school and the school administration as to maintaining a health register inclusive of the contagious medical cases, special cases, vaccination campaigns, sick leaves and all that pertains to the mechanism of patient referral to the health unit, also another register of the preventive health aspects, doctor visits, various activities in health at school, circulars and relevant instructions and to update these registers.
- Seventh:** To hold health seminars at least twice a year prior to and after midyear for school administrations and academic cadres, according to the sectors and schools for which he is responsible.
- Eighth:** The supervisors shall participate in enhancing mouth and teeth health and stressing upon school administrations and health coordinators to facilitate the task of physicians when visiting schools in order to examine the students.
- Ninth:** To submit scientific field research between the Education and Health Ministries on the determination of health problems .. and their comparison between one region and another, to determine the causes for their occurrence and to diagnose the appropriate treatment thus enhancing work by the primary health care methodology.
- Tenth:** To prepare the academic supervisor to become a primary health care leader through training on the priorities of school health services and granting him the skills, information and practices of the education sector. He shall in turn guide the teacher (health coordinator at the school), train him and develop his skills in the domain of school health.
- Eleventh:** To guide the Arts Education teachers to make artistic posters illustrating the following cases:
1) Street vendors.
2) Washing fruit and healthy eating methods.
- Twelfth:** To set up health guidelines through family education classes, to follow up the implementation of instructions and to spread the culture of not raising pets inside the home.

CHAPTER SIXTEEN

Tuberculosis

Unit Responsible for Offering the Service.

- Treatment provider at the health center.
- Tuberculosis coordinator in the sector.
- Coordinator: School Health Officer.

Objectives:-

- To improve the detection of cases and to observe treatment.
- To fingerprint and to identify.
- To raise health awareness in society.
- To develop the staff abilities in school health in terms of tuberculosis, guidance methods and counseling.

What Is Tuberculosis:-

It is a contagious disease caused by microbes called tuberculosis basillus (Koch bacillus) in reference to the German scientist Robert Koch who discovered it in 1882 A.D. The disease strikes any part of the body (mostly the lungs).

General Symptoms:-

Rise in temperature that may reach 39 degrees in severe cases.

Lethargy and discomfort.

Weight loss.

Special Symptoms:-

Tuberculosis symptoms differ according to the place of affliction in the body.

Fever and night sweats

Continuous cough for over 2-3 weeks without response to antibiotics (in case of pulmonary tuberculosis)

Cough may be accompanied by phlegm mixed at times with blood

Enlargement of the lymphatic glands (tuberculosis) in the tuberculosis of the lymphatic glands

Stomach ache in the tuberculosis of the mesentery membrane

And so on according to the afflicted organ.

Contagion:-

The bacteria is transmitted from a sick person to a healthy one through air while coughing, sneezing or spitting on the ground or by drinking unpasteurized milk originating from an animal sick with tuberculosis.

Treatment:-

The tuberculosis patient treatment consists of a drug cocktail (several drugs) that achieves a cure rate that may reach 100%. In the event the patient observes the treatment and continues the required examinations within the short term treatment program under the direct supervision approved by the national program for tuberculosis control in Iraq (refer to the National Guide for Tuberculosis Control in Iraq).

Duties of treatment provider in school health:

The treatment provider shall follow up the students or individuals of the school community afflicted with tuberculosis by coordinating with the school administration and the health coordinator, according to the health condition, and he shall follow up those refraining from treatment, as the case may be.

The tuberculosis coordinator in the sector shall educate the school community on tuberculosis risks and control through coordination with the health coordinators in academic establishments.

Why counseling in the area of tuberculosis:-

Tuberculosis counseling in our academic establishments is deemed very important in light of the significant role of students and academic cadres in spreading the required health awareness in society in order to eradicate this dangerous disease and the stigma that is associated with it.

Health Coordinator Duty in Schools:-

The health coordinator shall spread the following health messages in order to attain the required health awareness for the eradication of the disease and its social stigma.

Tuberculosis is a dangerous disease that is, however, curable if the patient observes the treatment and continues the required examinations with the tuberculosis coordinator in the sector.

The disease strikes the rich and the poor.

It is imperative to cease the bad habits such as spitting on the ground and not using a handkerchief when coughing or sneezing.

To refer to the health center when suspecting an affliction with the disease and not to feel ashamed of informing others of the same.

To refer to the health center in order to verify not being afflicted with it in the event a family member or close friend is afflicted with the disease.

The tuberculosis vaccine prevents the dangerous complications of the disease, but does not prevent affliction with it.

A tuberculosis patient can resume his normal life after a limited period (often not exceeding one month) if he fully observes the treatment.

Treatment is available and free of charge at health centers and is administered to the patient throughout his treatment period (often 6 months).

Observance of the treatment decreases the contagion period and expedites the return to school.

Not taking the medication correctly may lead to treatment resistant tuberculosis that requires more medication and a longer recovery period.

- b- To celebrate the Universal Day for Tuberculosis Control (24 March) by conducting activities that enhance student awareness of the disease and contribute to minimize the social stigma (such as writing a composition on the disease of tuberculosis, a theatrical play ...).
- c- To follow up the progress of the medical cases registered at school with the tuberculosis coordinator in the sector in order to learn the best treatment methods and the examination of those in contact with them.
- d- To guide the class advisors as to the necessity of monitoring the general health condition of students, to send the suspected cases to the health center, to care for the patient and to support him morally upon his return to school.

CHAPTER SEVENTEEN

School Health Medical Committees

They consist of two committees

First // Special Education Committee

It consists of:-

A pediatrician.

An ophthalmologist.

An ear, nose and throat physician.

A psychological and neurological disease physician.

The representative of Special Education at the Ministry of Education.

Second // Education Committee

It consists of:-

An internal medicine physician.

An obstetrician and a gynecologist.

A fracture and joint physician.

An ophthalmologist.

A general surgeon.

A primary health care physician.

Both are affiliated to the Ministry of Education / Health Departments in the governorates / Technical Matters Division / Medical Committees Branch.

Objective

Special Education Committee:-

1. To examine the students referred to it by Elementary schools or through primary health care centers and those afflicted with diseases and handicaps, among whom slow learning, poor hearing, stuttering, behavioral disorders, poor eyesight, mental retardation, mongolism, deafness, physical handicaps or spinal diseases in order to transfer to special classes of every category, whether schools of the Ministry of Education or institutes of the Ministry of Labor and Social Affairs and to transfer those afflicted with very poor eyesight, severe mental retardation, Down syndrome or autism to schools or institutes of the Ministry of Labor and Social Affairs, as the case may be.
To transfer the students who are fourteen years of age and older to handicap diagnosis centers in Baghdad governorate and to the medical committees affiliated to the Ministry of Labor and Social Affairs in the remaining governorates for their distribution to institutes for the handicapped and sending them to vocational rehabilitation centers to rehabilitate them vocationally as commensurate with their handicap with the aim of employing them in factories and plants following their rehabilitation.

Mechanism

To diagnose the students and to send them to the Special Education Committee with a letter addressed to the committees by the educational establishment (the school) or the health center, along with doctor reports.

Second // Education Committee:-

- To examine students of missions and fellowships, those delegated to study or to train outside Iraq, students admitted to higher studies in Iraq or those nominated for admission into colleges, institutes and school following their transfer by the health center in order to determine the type of study.
- To recommend changing the type and nature of the work of the delegates of the Ministry of Education and the Ministry of Higher Education and Scientific Research to which they are referred.
- To recommend the transfer of the student from university, college, institute or school to another for medical reasons.
- To refer to other medical committees affiliated to the Ministry of Health.
- To look into confirming the entry and exit certificates of the occasional students of both ministries from private hospitals following their attestation by the Association of Physicians, provided that the certificates are submitted to the committee within ten days from the date of leaving the hospital.
- To recommend changing the academic branch in colleges or institutes for medical reasons, provided that this is restricted to first year students.
- To recommend that the student abstains from strenuous athletic activity or postpones his participation in qualifying courses or to exempt a faculty member from strenuous work, as the presented health case may be.
- To express an opinion about the transfer of teachers to a school at a proximity of their residence for medical reasons.
- To look into the request of postponing the academic year or considering it a non-failure year for medical reasons.

Mechanism

To refer the student or the occasional student of both ministries to the committees along with a letter addressed to the committees by the educational establishment (the school) or the institute or to the health center and subsequently to the committee, along with doctor reports.

Monitoring and Evaluation

The School Health Branch Manager at the Health Department shall, in coordination with the Technical Matters Division / Medical Committees Branch, prepare these committees and the statistics required on the numbers of referred students and their feedback.

CHAPTER EIGHTEEN

Focus of School Health and Environment

Introduction:

The importance of school health services is common knowledge. The Public Health Law No. 89 of 1981 and its amendments – Part Two refers to school health services in Articles (9 – 10 – 11 – 12 – 13) in view of the great impact of these services on preparing the appropriate school environment and making the school attractive for students.

Objective:

The objective of the school health and environment focus is to support the students, academicians and health cadres working in school health environment monitoring and improvement, in addition to providing the school staff with school health awareness skills.

The tasks and duties of the preventive or health cadres in school environment and health focus
To follow up the implementation of health and environmental conditions in schools and Kindergartens in accordance with the health monitoring plan as follows:

School Building and Location

The school building must be according to a modern engineering design that observes the World Health Organization standards of school construction while taking into consideration the environmental determinants and the proximity to residential areas.

a. Area:

It shall be commensurate with the numbers of anticipated students in the residential area and not less than 10-15 meters of total area for each student. The area of every classroom must be no less than 6 x 8m² so that the area for every student is 1-1.5m² per classroom with a ceiling height of 4 meters. Heating, cooling and healthy ventilation shall be provided for every classroom and the height of the external fence shall be no less than 180 cm. The school area shall be commensurate with the student numbers with an area of 2m² per student.

b. School Canteen:

To provide a room or a booth with an area not less than 8 m² provided with a sink securely connected to the pipes and good ventilation. It shall contain an electrical refrigerator for preserving sulfonated food, beverages and juices canned by officially licensed factories with manufacture and expiry dates on them. Waster container with lids must be provided near the canteen according to the form that has been endorsed for school canteens and enclosed with this focus.

The person or persons responsible for the school canteen shall officially note working at the school and each of them must obtain the medical examination card and the health education certificate, this with respect to Kindergartens, Elementary, Middle and Preparatory schools.

As to restaurants in colleges, institutes and State homes, they shall be governed by the Health Monitoring Branches, each according to its geographic location. They shall be dealt with according to the public Health Law No. 89 of 1981 and its amendments through organized visits by the health teams.

c. Sanitation Facilities:

A sanitation facility must be provided for every 25 students. The sanitation facilities shall contain the following:

A continuous water supply or tank.

A cleaning siphon for every sanitation facility.

An air extractor for every sanitation facility.

Small containers with lids for waste.

The provision of a number of sinks commensurate with the numbers of sanitation facilities and which shall be securely connected to the pipes. Washing soap must be provided daily.

The daily use of disinfectants in sanitation facilities.

d. The Environmental Aspect at School:

(A healthy environment embodies the safety of air, water and soil)

Air safety: it was mentioned within the school's modern engineering design which takes into consideration the location of the school being away from factories, noise areas and sanitary dumping areas.

The school must be provided with a continuous water supply while securing the provision of modern non-corrosive tanks in sufficient numbers so as to supply every student with (10 gallons daily). It must be clean and with a lid with the rate of chlorine therein not less than 0.5 parts per million upon its examination by the preventive or health cadres on school visits.

A drinking water compound must be made available to students with good quality inverted faucets guaranteeing not transmitting diseases upon their use. The pipes shall be tightly connected to the main sewage network.

Well-paved halls and yards must be made available without the possibility of sliding thus guaranteeing the safety of children from falling accidents. The yards and halls must be provided with tightly secured pipes for the disposal of rainwater.

The school garden must be landscaped, under specialized supervision (a farmer) and always clean thus embellishing the school environment.

Waste baskets must be provided in school halls and near the school canteen in order to teach the students to observe the cleanliness of the school environment.

To provide large containers equipped by the Municipality for the purpose of collecting waste and cleaning it by Municipality cares in an organized manner without burning it in school thus guaranteeing that the air is not polluted with poisons and does not seriously impact the general health.

To monitor and to follow up the health hazards close to school and to notify the municipal authorities for their removal.

Note:

With respect to State homes and student boarding divisions in colleges and institutes, they are governed by the health teams in the Health Monitoring Branches, each according to its geographic location. The health conditions of hotels and restaurants shall apply therein according to the instructions issued by virtue of the Public Health Law No. 89 of 1981 and its amendments. They are not among the tasks of the preventive or health cadres in school health focus.

(Staff Health Focus)

Law No. 34 Second of the Public Health Law No. 89 of 1981 refers to staff health.

The staff working in the provision of school services, other than the faculty, is in direct contact with the students and the academic cadres. Thus, it is imperative to ensure their lack of communicative diseases along with the necessity of educating them as to their participation in the health awareness courses that are held at the Health Monitoring Branches in the primary health care sectors. Consequently, the following annual examinations are administered to them:-

The acquisition of the medical examination card that is renewed every year.

The acquisition of the health education certificate that is renewed every two years.

The necessity of continuous health awareness of staff by the health teams visiting the schools through emphasizing the importance of personal hygiene, wearing aprons and gloves and caring for the cleanliness of the school canteen and the school in general. The health teams shall distribute circulars and folders aiming to stimulate health awareness directed toward protecting the health of the students.



CHAPTER NINETEEN

The Concept of Special Education (Special Needs)

Introduction

It is a set of specialized academic programs that are offered to categories of unusual children in order to help them to adjust to society. The special education concept, through school health services, indicates that it is a set of academic and health services that are offered to normal and unusual students so as to secure the provision of adequate circumstances for their sound growth into the required academic, health and psychological performance. We hence find that the roots of special education are closely connected to medicine, psychology, neurology, anatomy, blood chemistry, developmental and growth psychology, measurement and assessment. Every child has the right to lead a normal life as he has the innate disposition to learn and to live a normal life enjoying health, life and the ability to contribute to building society.

Objectives

1. To develop student abilities (slow learning, poor eyesight, poor hearing, speech difficulties) in order to keep abreast with their normal peers on the average within one age bracket and one academic level.
2. To raise the academic and health process competency within the Elementary school.

Categories Involved in Special Education:

- The gifted.
- The motor impaired.
- The visually impaired.
- The hearing impaired.
- The learning disabled.
- The double or multiply handicapped (physical handicap, children polio) who possess a normal or less than normal mind, average or normal intelligence.

Special Education Objectives:-

- To identify unusual children through appropriate measurement and diagnosis tools for every special education category.
- To prepare academic programs for a category of the special education categories.
- To prepare teaching methods for a category of the special education categories in order to achieve the objectives of academic programs based on the individual academic plan.
- To prepare the technical teaching methods for every special education category.
- To prepare the prevention programs in general and to strive, as possible, to minimize the occurrence of the handicap through a number of preventive programs.

Diagnosis Mechanism for Special Education Students and Their Referral to

Committees:-

First:- Grade One Classes (Diagnostic):-

The first year of the Elementary stage is deemed a diagnostic and instructional year for slow learning and special needs students. It is on this basis that a special education teacher is appointed per school where one special class is opened. These schools are supervised within the one geographic location. The diagnosis process is carried out in accordance with the following:-

- The special needs teacher shall write three monthly reports for the months (November, December and January) while the regular class teacher shall write one report on every student suspected of slow learning.
- The reports shall be submitted no later than (15 January) to the Special Education Supervisor for scrutiny in preparation for their submission to the Diagnosis Committees affiliated to the Ministry of Education.
- The school administration shall, according to instructions, refer the students to the Examination and Diagnosis Committee at the level of all the governorates in order to find out the health condition of the students and to continue their follow-up for determining the degree of weakness and treating it.
- The school administration shall refer the students diagnosed as slow learners to the permanent Examination and Diagnosis Committees at the centers of the governorates, provided that these committees conduct an examination of the physical, intellectual and psychological aspects of the students referred to them. They shall provide every student with a medical report for the special class teacher and the Grade One teacher along with an examination and diagnosis form after having it filled out by the special class teacher.
- The students, who have been diagnosed by the Examination and Diagnosis Committees as slow learners in regular Grade One, shall continue their attendance during the second half of the academic year. The special class teacher shall, in coordination with the regular class teacher, focus on writing the reports for the months (March, April and May). Moreover, the regular class teacher shall write a report on every student suffering from slow learning.
- In the event there is a need to refer a number of students to the Examination and Diagnosis Committee for a second time, every student shall be provided with a file comprising (6) monthly reports for the special class teacher, (2) reports for the regular class teacher and the examination and diagnosis form along with the committee's decision as to the action it has taken the first time in order for the committee to make a second decision about the student. At the end of the academic year, the following alternatives shall be reached:
 - To consider the student as passing the regular Grade One to the regular Grade two after examining his condition, following it up and his overcoming the condition from which he is suffering.
 - To consider the student as passing the regular Grade One to the special Grade Two if it transpires that he needs special effort the following year.
 - To consider the student as failing Grade One if it transpires that he needs the special Grade One class the following year.

Second:- Grades One, Two, Three and Four Elementary.

- Special Grade One, Two, Three and Four students shall remain under the supervision and are taught by academic teachers in the following subjects (Arabic language, religion and mathematics) of Grades One, Two and Three and (science, health education and social sciences) of Grade Four. Students suffering from slow learning shall join the regular children in the remaining lessons.
- The special education teacher shall continue to write monthly reports on every student in terms of academic progress or delay and she shall attempt to examine these cases, each separately, with the Academic Supervisor in order to make him reach the regular class in the event he achieves what is required and is tutored outside official hours as needed. Moreover, these students can be integrated with regular students during the stipulated hours under the supervision of the school administration so as not to conflict with their curricula.
- The students, who are suspected of mental retardation, shall be referred to the Examination and Diagnosis Committees for the issuance of decisions in their regard for the purpose of their transfer to the Ministry of Labor and Social Affairs institutes for the mentally retarded.

Following the completion of Grade Four final exams, one of the following alternatives shall be taken:-

- To pass the student to a regular class in case he attains the required level for the regular student.
- To fail the student in special Grade Four (with a recommendation) to place him in regular Grade Five the following year.
- To fail the student in Grade Four for two consecutive years.
- To refer the student to the Ministry of Labor and Social Affairs for his admission to its institutes.

The Special Education Committee shall consist of:-

- An ophthalmologist.
- A psychologist.
- An ear, nose and throat physician.
- A representative from the Ministry of Education, Special Education Department.

Committee Work:-

- To examine the children referred from Elementary school and suffering from (slow learning, poor hearing, stuttering, behavioral disorders, poor eyesight, physical handicap, spinal diseases) and to transfer them to special education classes available in Elementary schools.
- To transfer those suffering from very poor eyesight, severe mental retardation, Down syndrome and autism to special schools at the Ministry of Labor and Social Affairs.
- To refer those who are fourteen years of age or more to Diagnosis and Handicap Centers in the governorates and to the Technical Medical Committees affiliated to the Ministry of Labor and Social Affairs in the remaining governorates for their distribution to institutes for the handicapped and sending them to vocational rehabilitation centers in line with their handicap in order to employ them in factories or plants following their rehabilitation.

Nutritional condition: 1. Normal 2. Stunting 3. Severe stunting 4. Excessive height
 5. Low weight: 6. Extremely low weight 7. Thinness 8. Severe thinness 9. Excessive weight
 10. Obesity

Ear / outer ear deformities			
Hearing examination			
Speech /			

Vaccination situation verification: Information source: 1- Vaccination card 2- Permanent record
 3- Mother's or father's memory

1- Completed vaccines 2- Incomplete

Vaccines provided during the examination (to be mentioned with date):-

..... Date

Examination of psychological condition: General appearance 1. Good 2. Not good
 Attention and concentration 1. Good 2. Not good
 Response and communication 1. Good 2. Not good
 Hyperactivity

Mouth and teeth examination:

Gum examination: 1- Healthy 2- Afflicted

Mouth examination: 1- Healthy 2- Afflicted

Number of milk teeth with cavities Number of permanent teeth with decay

Number of missing milk teeth Number of missing permanent teeth

Number of milk teeth treated with fillings Number of permanent teeth treated with fillings

Committee recommendations to:

1. School administration
2. Student's parent
3. School health team

- Referral

- Feedback

Other remarks

- Accepted in regular classes - Accepted in special education classes
- Accepted at the institutes for the handicapped

Note / - The vaccination card shall be enclosed with the form and the reports, if any - To be marked with the sign x inside the circle of the relevant selection

Name and signature of Committee Chairman

Name and signature of School Health physician
Name and signature of dentist
Seal of the Health Center

Annex No. (2)

Assessment Form of New Student Reception Plan at Health Departments According to Plan Indicators

Primary Health Care Sector No. of health centers affiliated to the sector
 Number visited for the month of Name of Health Center Visit
 determined / First Second

S	Indicator	Criterion	Grade Limits	Earned Grade	Problem, If Any	Field Remedial of Problem
1	Administrative order	There is an administrative order by the Examination Committee Chairman and members	10			
2	Minutes of meetings	Minutes of meeting of health or academic cadres organized by the administration Documented	5			
3	Level of committees	First: duties and tasks of committee members are specified	5			
		Second: the manager follows up the accuracy of the organization of the provisional committee's register	5			
		Third: the examination and statistics are followed up by the manager (Committee Chairman)	5			
4	Training	First: the working medical and health cadres (actually involved in the execution of the plan) are trained on the work contexts of the school health plan for the academic year 2013-2014 by the Health Department according to plan	10			
		Second: other health cadres from the center or academic cadres representing schools within the geographic area are trained through a course or a meeting by the center's administration	10			
		Third: the health cadres at Hearing Planning Units are trained (pertinent to Hearing Units)*	5			
5	Media	First: there is an informative sign about student examination	5			
		Second: visual messages about new student examination within the center are broadcast	5			
		Third: there is an announcement at the health centers about the form being gratuitous	5			
		Fourth: there is a schedule announcement specifying the schools' referral according to the days of the week.	10			
6	Accuracy	The clinical and laboratory examination is conducted accurately	15			
		Accuracy of the organization and documentation in the register of the provisional committee	20			
		The nutritional status is evaluated accurately				
		Vitamin A is dispensed	15			
		The referral is accurately made in duplicate with	5			

		outgoing and the seal of the center and it is sent to counseling or the committees	5
		The health center retains the student examination form until obtaining the feedback	5
		The feedback is followed up well	
		The recommendations are fully written and signed by the committee	10
		The poor-sighted 24/6 or more and those suffering from strabismus are examined and referred to eye consulting at specialized hospitals	10
		Those suffering from hearing problems are examined and referred to Hearing Planning Units at included health centers according to the schedule	10
		The required procedures and treatments are accurately offered to all suffering from teeth diseases	10
7	Flow	First: the examination is conducted in organized batches within a referral schedule organized so as to avoid crowding, this through coordination between health and academic establishments in order to guarantee the referral of students from schools to health centers.	20
8	Documentation	First – the information is documented in the register of the provisional committee according to the official form (divided according to Kindergartens and Elementary schools)	10
		Second: a special file is opened for the plan at the health center	5
		Third: documentation of the committee’s work by photocopying and sending a copy to the School Health Branch	15
9	Supervi-sion	First: supervision by center managers of the work of the provisional committees at health centers	5
		Second: supervision by the academic supervisor within the center’s committee of the work of provisional committees	5
10	Require-ments	First: the examination room is suitable and of an adequate area	10
		Second: a sufficient number of gratuitous medical examination forms have been distributed to schools	10
		Third: provision of all the examination requirements (scale, examination pouch, eyesight examination chart, nutritional status evaluation guide)	25
11	Initiatives	The initiative, if any, and its type (additional evaluation grade)*	-5
			20

GRAND TOTAL

X / / /

Health Center Evaluation Grade = Total divided by 3

X / / /

Note: The mark * is an additional evaluation grade granted to the health center in the event of good execution of these additional criteria

Names of visiting team 1. 2. 3.

Name and signature of supervisor:- Date:-

Seal of Health Center

Annex No. (3)

Medical Examination Form for Applicants to Universities, Institutes and Vocational Schools

Health Department / Public Health Division

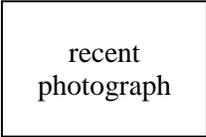
Sector Primary Health Care Center

Student full name (3 parts) Gender

Name of school graduating from Graduation year

College, institute or school likely to be accepted in

Medical examination //



Eyesight		Right Eye	Left Eye	Remarks
	Visual acuity			
	Color blindness			
	Strabismus (type to be mentioned, fixed or alternating)			
	Nystagmus			
	Eye lens			
	Retina and optic nerve			
Hearing		Right Ear	Left Ear	
Speech				
Lung examination				
Heart examination				
General appearance	Congenital deformities (to be mentioned)	Physical deformities and defects (to be mentioned)		
Psychological, mental and neurological condition				
Psychological, mental and neurological diseases (formerly diagnosed)				
Chronic or incurable diseases (to be mentioned)				
Decision of provisional committee				
Referral to the Education Committee				
Decision of the Education Committee				

Medical Committee members 1. 2. 3.

Chairman of the Committee
 Seal of Health Center
 / /2012

Annex No. (4)

Register Plan of New Students Applying to Universities and Institutes

S	Student Name (3 parts)	Age	Gender	Name of School Graduating from	Name of College or Institute likely to Be Accepted in	Graduation Year

Eyesight

Right Eye							Left Eye						
Visual Acuity	Blind	Color Blind	Strabismus (fixed or alternating)	Nystagmus	Eye Lenses	Eye Retina	Visual Acuity	Blind	Color Blind	Strabismus (fixed or alternating)	Nystagmus	Eye Lenses	Eye Retina

Hearing		Remarks	Speech	Lung Examination	Heart	Congenital Deformities	Physical Deformities	Defects
Right Ear	Left Ear							

Psychological, Mental and Neurological Condition	Psychological, Mental and Neurological Diseases (formerly diagnosed)	Chronic or Incurable Diseases (to be mentioned)	Committee Decision	Referral to Ministry of Education	Decision of Ministry of Education

Annex No. ()

Regulations

First Appointment Table:

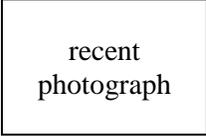
- 1- It includes the appointment of graduates of the colleges of medicine, dentistry, veterinary medicine, pharmacy, engineering, agriculture and science and the graduates from institutes, medical, health and industrial schools and the various scientific technical departments in all colleges and institutes.
The Medical Committee observes the following in a candidate for appointment:
 - a- To be physically fit so as to qualify for the job of which he is in charge.
 - b- Not to be afflicted with one of the chronic incurable, psychological, mental or neurological diseases that affect his work.
 - c- His speech shall be normal and intelligible and his hearing normal. The degree of hearing shall be determined in case of doubt by the specialized physician.
 - d- His eyesight shall be no less than 12/6 x 12/6 with or without eyeglasses or its arithmetic equivalent provided that he is free of total color blindness and nystagmus and is not afflicted by retinal diseases. The eye lens or its replacement shall be functional and this shall be determined by an ophthalmologist.
 - e- He shall not be afflicted with nystagmus or fixed strabismus.
- 2- In case of alternating strabismus in the examinee with an eyesight meeting the aforementioned in paragraph (d) of clause (1) of this table, he may be appointed in jobs with the exception of those requiring a three-dimensional vision according to instructions.
- 3- It includes the appointment of graduates from scientific non-technical departments that do not require a three-dimensional vision:
 - a- Visual acuity shall be no less than (18/6 x 18/6), (24/6 x 12/6), (9/6 x 36/6) or 6/6 or lacking (with or without eyeglasses).
 - b- Those suffering from fixed or alternating strabismus or nystagmus or if the eyesight is as stipulated in paragraph (a) of this clause, may be appointed.
- 4- General clerical functions require a visual acuity of 18/6x18/6, 24/6x12/6, 9/6x36/6 or 6/6 or lacking with or without eyeglasses.
- 5- Foreign corps jobs require 9/6x24/6 with or without eyeglasses.
- 6- Other jobs, namely:
 - a- A screen employee or (glitch monitor) 9/6x9/6 without eyeglasses shall be free of total color blindness and over the age of (40) years with eyeglasses.
 - b- An aide, farmer and porter shall have 36/6x36/6 with or without eyeglasses or its arithmetic equivalent.
 - c- 12/6x12/6 for the electrician, painter, electronics worker, radio, television and telephone mender and telephone cable extension worker with eyeglasses or its arithmetic equivalent with the absence of total color blindness.
 - d- 12/6x18/6 for the carpenter, tailor, battery charger with or without eyeglasses or its arithmetic equivalent.
 - e- Driver according to the instructions issued by the Ministry of Health to that effect.
 - f- For persons qualified for the jobs of Muezzin, mosque speaker, music teacher ... etc. or other jobs not mentioned in the tables of regulations and, upon their meeting the physical fitness conditions at the discretion of the Medical Committee, it may look into their appointment as deemed with regard to the fulfillment of those conditions.

Table Four for Admission to Colleges, Institutes and Schools

- 1- It includes the admission of students into the colleges of medicine, dentistry, pharmacy, veterinary medicine, engineering, agriculture and science and the graduates from health, engineering, industrial and agricultural schools and the various scientific technical departments in all other colleges and institutes. In order to determine the admission conditions in scientific technical departments, the following shall apply:-
 - a- The eyesight examination shall be determined by an ophthalmologist as follows:-
 - First:** The visual acuity shall be no less than $12/6 \times 12/6$ with eyeglasses or contact lenses, without them or its arithmetic equivalent so that the total denominator does not exceed 24.
 - Second:** He shall be free of total color blindness and nystagmus. The eye lens, the retina and the optic nerve shall be intact.
 - Third:** A person suffering from fixed or alternating strabismus or nystagmus shall not be admitted regardless of how good the eyesight is.
 - b- He shall be free of congenital or physical deformities that prevent movement or work or that arouse repulsion.
 - c- Speech shall be normal and intelligible.
 - d- He shall be free of psychological, mental and neurological diseases.
 - e- The hearing shall be normal with any impairment not exceeding twenty standard audio units.
 - f- He shall be free of chronic and incurable diseases.
- 2- Admission to scientific non-technical departments (mathematics – physics – chemistry – administration and economics and others) shall require:
 - a- The visual acuity shall be $(18/6 \times 18/6)$, $(24/6 \times 12/6)$, $(6/6 \times 36/6)$ or $(6/6 \times \text{lacking})$ with or without eyeglasses.
 - b- Those suffering from fixed or alternating strabismus or nystagmus, or if they meet the conditions stipulated in paragraph (a) of this clause, may be appointed.
- 3- Admission of students to Physical Education studies shall only include:
 - a- Eye examination / the information shall be determined by an ophthalmologist as follows:
 - First:** The eyesight shall be no less than $12/6 \times 12/6$ without eyeglasses or its arithmetic equivalent so that the total denominator does not exceed 24.
 - Second:** He shall be free of total color blindness and nystagmus. The retina and the optic nerve shall be intact and the eye lens shall be functional.
 - Third:** A person with fixed or alternating strabismus or nystagmus shall not be admitted regardless of how good the eyesight is.
 - b- He shall be free of congenital or physical deformities that prevent movement or work or that arouse repulsion.
 - c- He shall be free of psychological, mental and neurological diseases.
- 4- It includes the admission of students to Human Studies:
 - a- The eye examination shall be determined by an ophthalmologist with a visual acuity no less than $(60/6 \times 60/6)$ with or without eyeglasses.
 - b- The presence of some congenital and physical defects shall not prevent the admission provided that their impact is not severe on work performance and movement.
 - c- In translation and interpretation, hearing and speech must be normal.
 - d- He shall be free of psychological, mental and neurological diseases.

Medical Examination Form for Applicants to Universities, Institutes and Vocational Schools

Health Department / Public Health Division
 Sector Primary Health Care Center
 Student full name (3 parts) Gender
 Name of school graduating from Graduation year
 College, institute or school likely to be accepted in
 Medical examination //



Eyesight		Right Eye	Left Eye	Remarks
	Visual acuity			
	Color blindness			
	Strabismus (type to be mentioned, fixed or alternating)			
	Nystagmus			
	Eye lens			
	Retina and optic nerve			
Hearing		Right Ear	Left Ear	
Speech				
Lung examination				
Heart examination				
General appearance	Congenital deformities (to be mentioned)	Physical deformities and defects (to be mentioned)		
Psychological, mental and neurological condition				
Psychological, mental and neurological diseases (formerly diagnosed)				
Chronic or incurable diseases (to be mentioned)				
Decision of provisional committee				
Referral to the Education Committee				
Decision of the Education Committee				

Medical Committee members 1. 2. 3. 4.

Chairman of the Committee
 Seal of Health Center
 / /201

Environmental and Health Inspection Form of Schools and Kindergartens

Health Department Primary Health Care Sector Health Center Name

Academic Year Name of visited school

Type of school:- Governmental Private Nursing preparatory Religious

Studies school Religious Shiite Waqf school Religious Sunnite Waqf school

Type of school according to stage:- Kindergarten Elementary Middle

Preparatory High School

Shift at academic establishment Single Double Triple Quadruple

School location Urban Rural

No. of school students Boys () Girls () Date of visit .../.../201 A.D.

No. of academic staff (Director, Assistant, teachers) No. of service employees

This form shall be filled out based on the School Environment Guide Enclosure no. (20) and a ✓ mark shall be placed within the square in case of environmental deficiency

<i>*The environment surrounding the school is unhealthy due to</i>	6- Classroom walls are unclean or require painting	
1- Presence of noise	7- Blackboard unsuitable (as per School Environment Guide)	
2- Presence of waste	8- No oil chalk or magic markers	
3- Presence of factories	9- Window glass is unsuitable (broken)	
4- Presence of water compounds	<i>*Student seats</i>	
5- Presence of nasty gases	1. Their number is not commensurate with student numbers	
6- Pets		
<i>*School building</i>	2. Unsuitable for bodily and physical structure of student and according to stage	
1- Construction material is mortar	<i>*Health groups</i>	
2- Cracks or demolition present in school building	1. There is no potable water ... 2. (Supply ... or tank ...) 3. Other sources (to be mentioned) 4. Are there water coolers? Yes ... No ...	
3- School building is currently under renovation	2. Rate of chlorine is unsuitable (less than 0.5 parts per million)	
4- Total school area is not commensurate with student numbers. Ideal: (10-15) m ² per student calculated (total school area / student no.)	3. Number of drinking water faucets is insufficient in terms of student number: sufficient number = (one faucet for every 50 students)	
5- School garden is not maintained	4. Drinking water faucets are not per regulations (not inverted upwards)	
6- There is no school garden No ... Yes ... Used ... Unused ... Maintained ... Not maintained ...	5. The number of sanitation facilities is insufficient in terms of student number: ideal: (one sanitation facility for every 25 students)	
7- There is no fence for the school	6. The sanitation facilities do not comply with health conditions (according to the School Environment Guide)	
8- The school fence is not according to regulations (height per regulation is 180 cm)	7. Drinking water tanks are insufficient in terms of student number Ideal: (10 liters per student)	
9- School is unclean	<i>*There is no eyesight examination board</i>	
<i>*Service workers</i>	<i>*First aid equipment is not available</i>	
1- There is no sufficient number of service workers	<i>*Disinfectants and sterilizers are not available in school</i>	

(one worker for every 100 students)		
2- There are no medical examination cards for staff (renewed every year)		Soap is not available
3- There are no health education certificates for staff (renewed every two years)		<i>*Fire extinguishers</i>
*School yard		1. Not available
Available ... Paved ... Yes ... No ... Not available		2. Available and suitable for use
1- Not according to regulations (as per the School Environment Guide)		3. Available and unsuitable for use
		Edge of stairs covered with rubber material. Yes ... No ...
2- Rainwater is not disposed of from yards according to regulations (not connected to a systematic pipe network)		<i>*School canteen</i>
<i>*Classroom</i>		1. Not available
1- Classroom area is insufficient		2. Available and not meeting the health conditions
2- Natural ventilation is insufficient (window area 6/1 – 4/1classroom area)		3. Available and not observing healthy and safe food
3- Artificial ventilation is not available or insufficient		4. There is no medical examination card for staff at the canteen (valid)
4- Natural lighting is insufficient		5. There is no health education certificate for staff at the canteen (valid)
5- Artificial lighting is unavailable and insufficient		*There are no regular waste containers with lids in classrooms, halls and yards. Waste disposal. 1. Through the Municipality Department ... 2. Other means to be mentioned ... 3. Waste is improperly collected ...
		<ul style="list-style-type: none"> • Electricity • National ... • Generator • Nil

❖ Health Team Recommendations to School Administration Concerning the School's Environmental Deficiencies to Be Made Available and Remedied.

To address the Municipal Department within the geographic location for the removal of waste and dirt from school surroundings.

- 1- To address the Engineering Building Division at the Education General Directorate for conducting a field inspection and remedying the environmental deficiencies in the school building.
- 2- The school requires cleaning.
- 3- To send service and canteen staff to the Health Monitoring Branch in the Primary Health Care Sector within the school's geographic location by virtue of an official letter and two photographs in order to regulate or to renew the health card and the health education certificate.
- 4- To address the authorities (Water and Sewage Directorate or Education Directorate) for the provision of potable water.
- 5- To provide () water faucets.
- 6- To invert the faucets upwards.
- 7- The school requires () additional sanitation facilities.
- 8- The school requires () additional (1000 liter) capacity water tanks.
- 9- To provide sterilizers to the health group.
- 10- To provide soap for the sinks.
- 11- To provide fire extinguishers.
- 12- To repair () out of order fire extinguishers.
- 13- To provide the health conditions in the school canteen.
- 14- To provide healthy and safe food in the canteen.
- 15- To provide regulated waste containers with lids in classrooms, halls and yards.

Name and signature of Manager

Name, signature and job title of visiting health team

1-

2-

3-

Seal of school

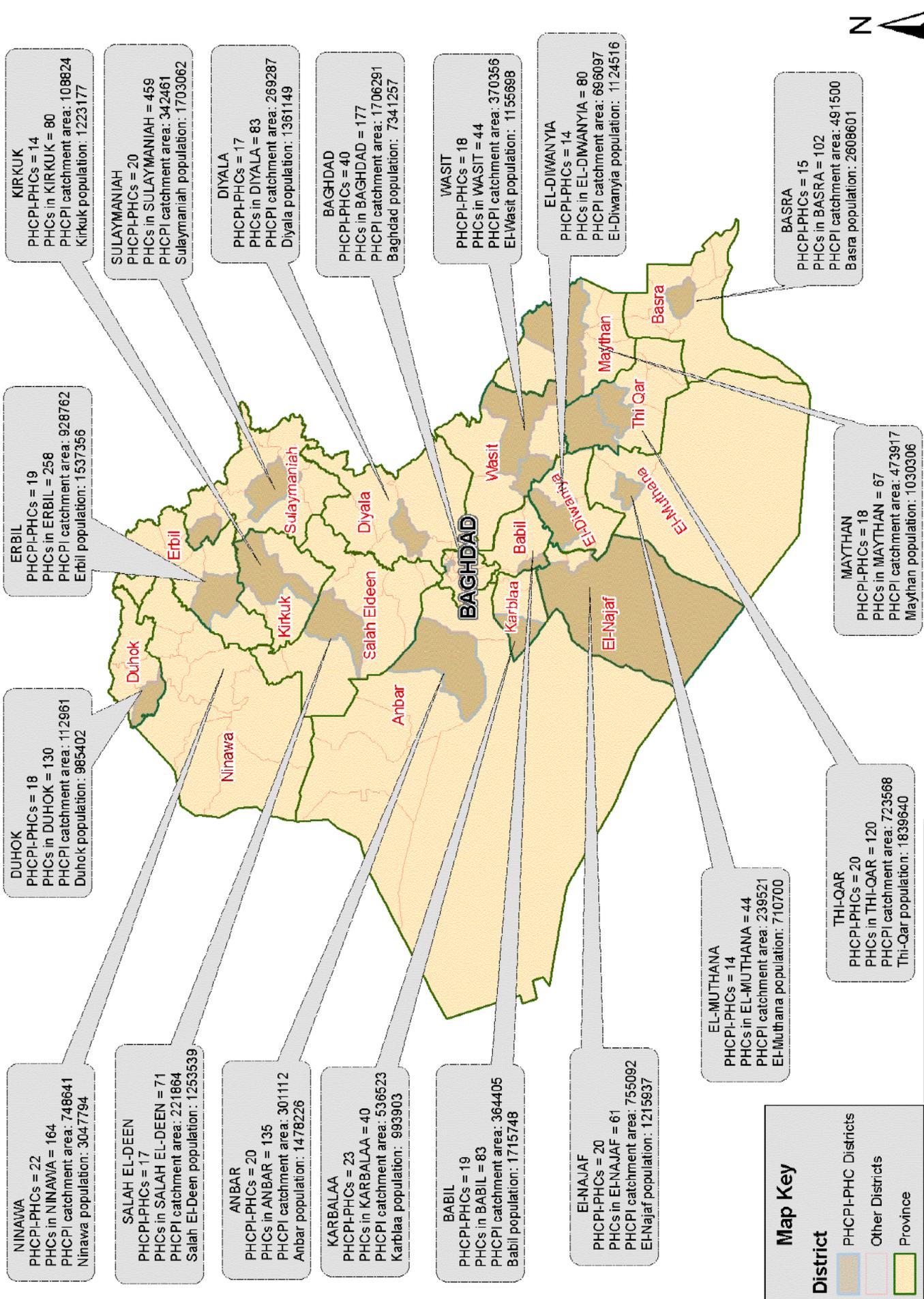
Sources

1. Work contexts of Health Enhancement Units at health centers / Ministry of Health
2. Health Enhancement Division plan in school health 2013-2014 / Ministry of Health
3. School health team tasks as determined by the Center Branch / Ministry of Health
4. Work contexts of the Health Enhancement Branch at Health Departments / Ministry of Health
5. Action plan of the Health Monitoring Division in school health / Ministry of Health
6. The Public Health Law of 1981 and 2000 / Ministry of Health
7. Medical Committees Work Guide / Technical Matters Department / Ministry of Health
8. Educational Reform in Iraq – Suggested Principles and Policies
9. Khalil Ibrahim Abdulatif / Strategy / Educational Reform in Iraq – Suggested Principles and Policies
10. School health services research in the education of special needs children in Iraq. Article from the internet
11. Quality assurance guide for school health services 2003
12. Expanded Immunization Program Guide / 2011
13. Annual plan for the Immunization Branch 2013
14. Annual plan for the School Health Branch 2002-2013
15. National plan for the examination of new students registered in Kindergarten and Grade One Elementary 2012-2014
16. Annual plan for the examination of students in colleges and institutes for the academic year 2013-2014

Steering Committee members involved in School Health Guide for Medical and Health Cadre Working at Primary Health Care Centers

- 1- Dr. Mohammed Shuiab Abdul Ghafoor / Ministry of Health**
- 2- Dr. Hassan Hadi Baqer / Ministry of Health**
- 3- Dr. Mohammed Jaber Huwail / Ministry of Health**
- 4- Dr. Mohammed Khuder Ali / Ministry of Health**
- 5- Dr. Majida Kareem Ahmed / Ministry of Health**
- 6- Dr. Iman Abdul Khaliq Salih / Ministry of Health**
- 7- Dr. Anwar Nouh Ghazala / Ministry of Health**
- 8- Dr. Bushra Jameel Hassan / Ministry of Health**
- 9- Dr. Hussam Abdul Razzaq Ahmed / Nutrition Research Institute**
- 10- Dr. Alyaa Ali Hussein / Ministry of Health**
- 11- Mr. Mohammed Saleem Hamady / Ministry of Health**
- 12- Dr. Nada Abdul Wahab Mussa / Ministry of Health**
- 13- Dr. Yussra Hafez / Ministry of Health**
- 14- Dr. Ayad Nouri Fatah / Ministry of Health**
- 15- Dr. Muhsin Hashim Rasin Hasan / Ministry of Higher Education**
- 16- Mr. Abdul Raheem Hassuin Ali / Ministry of Health**
- 17- Dr. Ibtisam Adnan Abood / Ministry of Health**
- 18- Dr. Ikhlas Younis / Ministry of Health**
- 19- Dr. Raghad Abdul Ridha / Ministry of Health**
- 20- Mr. Muhsin Hafeth AlZuhairy / Ministry of Education**
- 21- Ms. Amal Sadeq Mohammed / Ministry of Education**
- 22- Ms. Shahrazad Mustafa Abdul Rahman / Ministry of Education**
- 23- Ms. Muna Mohammed Ahmed / Ministry of Education**
- 24- Mr. Salman Hassan / Ministry of Education**
- 25- Dr. Ahlam Kadhum / Primary Health Care Project**

PHCPI-PHCs population mapped to IRAQ population



U.S. Agency for International Development
Primary Health Care Project In Iraq
<http://phciraq.org/>
www.usaid.gov