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MANUAL OF PUBLIC HEALTH NURSING  
TEXAS STATE DEPARTMENT OF HEALTH  
1949

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# A Manual of Public Health Nursing



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1949  
Public Health Nursing Division  
Texas State Department of Health  
Geo. W. Cox, M. D.  
State Health Officer  
Austin, Texas

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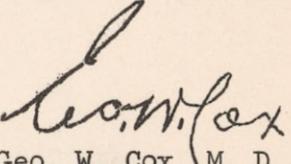
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## FOREWORD

In this Manual of Public Health Nursing recommended procedures and the underlying reasons for each are presented. In individual situations we expect various adaptations to be necessary, but one or more sound methods for each procedure are given.

It is intended that the policies stated herein be used in such manner as to conform with the policies and program of the whole organization.

The information pertaining to public health nursing activities, as in other professional fields, is subject to change from time to time. It is our intention to keep the manual up to date. We hope it will serve as a tool rather than a master for those who use it.

  
Geo. W. Cox, M. D.,  
State Health Officer

ACKNOWLEDGED



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PREFACE

This manual is intended as a presentation of concise information regarding the policies and objectives of the public health nursing service in this state. Procedures, technics, and tools to be used in maintaining policies and in reaching objectives are suggested. General principles follow those of the Manual of Public Health Nursing prepared by the National Organization for Public Health Nursing.

Subject matter is presented briefly. In order to provide a quick reference, clarity and simplicity have been stressed. The main value of the manual is in its usability as a guide in establishing and coordinating an effective public health nursing program.

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## PERSONNEL POLICIES

### APPOINTMENT

As provided in the State Law, the State Health Officer is the executive head of the State Department of Health.

The Statutes provide that the State Health Officer designate the duties and supervise the work of all Directors and employees who are paid from State Health Department funds. The final authority on the appointment of individuals paid from State funds is the State Health Officer.

Nurses who are employed in or assigned to Division of the Central Office are responsible to the State Health Officer through the appropriate Division Directors.

Nurses who serve in Local Health Units must work in compliance with the following Agreement, which is accepted by the State Health Officer and the local officials:

#### AN AGREEMENT BETWEEN THE TEXAS STATE DEPARTMENT OF HEALTH AND THE LOCAL APPROPRIATING AGENCIES IN THE OPERATION OF THE \_\_\_\_\_ HEALTH UNIT.

1. The expenditures on the face of this budget represent funds furnished by the Texas State Department of Health and the Local Appropriating Agencies of \_\_\_\_\_ County in the formation of the \_\_\_\_\_ County Health Unit.
2. All personnel carried on this budget are to have minimum qualifications or better as set up by the Texas State Department of Health Merit System. The State Department of Health and the Local Appropriating Agencies agree to accept the Merit System rules and regulations.

3. A Director shall be appointed to actively manage and operate the Health Unit. The Director of the Health Unit shall be a physician, licensed by the Texas State Board of Medical Examiners.

The Local Governing Bodies, by joint action or by concurrent agreement, shall appoint a Director who has been certified by the State Health Officer as being qualified under the minimum qualifications for Directors as established by the State Board of Health.

4. The Director of the Health Unit is to be in complete charge of all public health activities of the Unit and shall direct the personnel. He will have full authority to employ, discharge and transfer any and all personnel under his direction as provided in the Merit System Rule.

The Health Unit Director will be responsible to both the Local Appropriating Agencies and the Texas State Department of Health. He will make monthly reports to the Local Appropriating Agencies and the Texas State Department of Health concerning the activities of the Unit.

The Local Appropriating Agencies shall establish a Board of Health for the \_\_\_\_\_ Health Unit and if agreeable to the Local Appropriating Agencies the Health Unit Director may make his report to the Board of Health.

The Appropriating Agencies of the \_\_\_\_\_ Health Unit jurisdiction agree to furnish adequate office facilities and utilities for the necessary administrative and routine public health activities; office rent, payments on health center buildings, or utilities will not be shown on the annual operating budget.

5. In the \_\_\_\_\_ Health Unit jurisdiction, there will be no independent public health services carried out which may in any way conflict with or duplicate the activities of the standard Health Unit. The Director will be in charge of the Health Unit's activities for that area, and personnel on the face of this budget will be allowed to serve in any section of the Health Unit jurisdiction and at any time that the Director deems necessary.

6. It is understood that due to lack of State funds it may be necessary at some future date to reduce the financial participation on the part of the State.

All applicants must meet the minimum standards of the Merit System class in which employment is desired before appointments are

effective. Applications from all nursing personnel are addressed to the State Health Officer.

The following forms should be submitted:

1. "Application for Public Health Nursing, Form No. 8154," two copies; one for local file and one for state file
2. "Application for Employment, Form No. 1069," one copy for state office is attached to and forms a part of No. 8154
3. "Merit System Council Recommendation for Personnel Action, Form No. 1189," three copies for state office; one will be returned
4. "Merit System Council Personnel Record, Form No. 1132," two copies for state office
5. "Marital Status Affidavit, Form No. 1133," one copy for state office
6. "Receipt for copy of House Bill, No. 1081," one copy for state office; applicant retains upper half
7. "Income Tax Withholding, Form No. W-4," one copy for state office

Throughout Texas, due to the wide variation in local charters, ordinances, local civil service, and other regulations, there will be variations in personnel policies. It will be necessary, therefore, to modify the following procedures in some instances. In general, however, the principles will hold.

#### TRANSFER

In local health units requests for a transfer from one service to another should originate with the staff member desiring the change.

Nurses who are employed in services other than local health units

should transmit their request for a transfer through their immediate supervisor and State Director of Public Health Nursing, to the State Health Officer.

All requests for transfers must be cleared through the proper channels, i.e., the Director of both health units, and State Health Officer.

#### TERMINATION OF SERVICE

Appointments are terminated by resignation or separation. If the resignation is voluntarily made, two weeks' notice is usually required of the resigning member, however 30 days' notice is desirable.

Separation may be resorted to when an act which is detrimental to or reflects adversely upon the State Health Department, Local Health Unit, or Nursing Service is performed by an individual. Separation may also take place when there is a curtailment of workers or a lack of funds.

In Local Health Units, the "Merit System Council Recommendation for Personnel Action, Form No. 1189," should be filled in, signed by the unit director and forwarded to the State Health Officer.

#### LEAVE OF ABSENCE

Leaves of absence without pay may be granted for periods up to twelve months. These may be granted in case of prolonged illness, for further study, maternity leave, or where there is a definite

specialized duty assigned. Grants of leave are made with the understanding that no specific job or salary will be held for the worker on leave. Forms No. 1101 and No. 1189 are used for reporting leaves of absence.

#### LEAVES FOR PROFESSIONAL MEETINGS

Permission may be given to an employee to attend professional meetings such as: the Texas Public Health Association Annual Meeting; the Texas Graduate Nurses Association Annual Meeting, the State League of Nursing Education and State Organization for Public Health Nursing Annual Meeting, and in-service training courses held by the State Department of Health.

Travel expenses to conventions can be paid from State funds ONLY when special approval is obtained from the Attorney General. Request for the Attorney General's approval should be made through regular channels to the State Health Officer prior to attending the meeting. This expense may not exceed the State's per diem for hotel and meals. It may be allowed for attending special in-service training courses sponsored by the State Department of Health. Special instructions are usually sent to the employee when expenses are allowed to attend in-service training courses.

In some instances, local funds may be used for travel to professional meetings or conventions if such expense is approved by the local appropriating agencies.

## WORKING HOURS

The State law at the present time (February 1949) designates a forty-four hour working week. The schedule of hours varies according to the problems involved, but usually is as follows: Hours are from 8:00 A.M. to 5:00 P.M., Monday through Friday (with one hour for lunch), and 8:00 A.M. to noon on Saturday. Part time work in hospitals, other health agencies, etc., on holidays, weekends or other times is not permitted.

## OVERTIME

Special clinics and other work activities may necessitate working outside regular hours. In such instances, personnel may accumulate overtime. Employees may not be compensated for overtime by additional pay, but they may be allowed time off for the number of hours worked overtime. If possible, accumulated overtime should be taken on the day or within the week such overtime occurs. Only in the event of illness should an employee be allowed to take more than three days of accumulated overtime at one period. In local health units, different policies may prevail.

## HOLIDAYS

Holidays are determined by the local health director. Except in emergencies, these conform to the holidays observed by local county and city employees.

## SERVICE AND EFFICIENCY RATING

It is desirable for local health units to provide for and make effective a system of service ratings designed to give fair evaluation to quantity and quality of work performed. Such ratings can be prepared and recorded at regular intervals not to exceed twelve months. "The Probst Service Report"\*, in conjunction with the "Supervisory Field Visit Report", Form No. 8152, is a suggested form to be used by the supervisor for rating personnel. (See Section on Special Policies, page 22, for suggestions regarding the use of Form No. 8152.)

Service rating should be considered in determining salary advancement, in making promotions, demotions, dismissals, and in determining the order of separation due to reduction of staff.

The evaluation of service rating should be an objective one. It should be a cooperative procedure between the supervisory staff and the individual receiving the evaluation if the best results are to be obtained; therefore, it is suggested that effective means be used to inform the staff member of the methods used in evaluating performances. An opportunity should be provided for a private discussion of the evaluation report by the supervisor and the staff member.

\* "The Probst Service Report", Form JB 11 (2-40-25M), Published by Probst Rating System, 1843 Ashland Avenue, St. Paul, Minnesota.

UNIFORMS

In going into public health work or any other branch of nursing one takes on certain obligations and responsibilities and must make certain investments. One of these responsibilities is to wear the uniform of the organization with which the nurse is connected. The usual nurse in a local agency will ordinarily spend her working hours in uniform. Since this is true, the individual is expected to invest a large enough portion of her clothing budget in uniform attire to make good grooming possible. The public health nurse must remember that she is a nurse and that her blue dress is a nurse's uniform. Good taste demands that her accessories be hygienically simple as well as attractive.

REFERENCES

\* "Nursing Service Reports," Form 35 (2-20-32), published by  
Public Health System, 1843 Ashland Avenue, St. Paul, Minnesota.  
Local by reference available at various health departments.

## SPECIAL POLICIES

### ESTABLISHMENT OF LOCAL HEALTH UNITS

State financial assistance and State participation is available in the establishment of local health units where certain minimum standards of economy and efficiency are established. There must be no conflict or duplication of efforts, therefore, it is necessary before a health unit is established to secure assurance from the interested agencies that all groups will work as a unit.

The establishment of a health unit must be endorsed by all local health agencies and the local Medical Association.

### ADVISORY COMMITTEE

It is advisable that each health unit have a local Board of Health. In addition to the Board of Health, the health unit should have a local Medical Advisory Committee. All activities within the health unit program should be endorsed by the local Medical Advisory Committee and local Board of Health.

### GENERAL SUGGESTIONS FOR THE NURSE

#### Enlist Local Physician's Cooperation

In accordance with the policies established by the local health unit director, it is usually desirable for the nurse to meet each

of the physicians in her assigned territory as soon as possible. It may be desirable for her to discuss the health unit program with him and to explain the type of service she is prepared to render.

Through such a conference the nurse should be able to assure the physician of her cooperation.

#### Reports to Attending Physician

The policy will vary throughout the State and throughout the districts within a local health unit. One procedure is as follows:

After the first visit to a patient of a private physician the nurse must report to the physician the name and type of patient visited. She should ask for any special instructions he may have relative to the case and indicate how she thinks she will be able to help the family.

#### Public Health Nursing Activities

The public health nurse functions according to local health unit policies. Medical and surgical treatments and bedside care ordinarily are not given by the public health nurse. She demonstrates nursing care in the home and gives emergency nursing care when the need arises. Occasionally delivery assistance falls in this category.

Upon request of the physician in charge she gives treatment for demonstration purposes. The Texas State Department of Health recommends the following policy concerning the administration of immunizations:

The Director of the Health Unit or an authorized licensed physician should be present in the building when immunizing agents are

given. It is preferable that the physician himself administer the immunizing agents, but in large clinics it is realized that it may be necessary for nurses to administer these immunizing agents under the personal direction of a licensed physician.

#### Medical Care for Indigents

During the introductory period in a county the nurse should become familiar with the resources for and the channels through which it is necessary for indigent patients to obtain medical care. Families should always be stimulated and encouraged to make their own arrangements with the physician of their choice. If the city or county has a special physician charged with the care of the indigent, the nurse should use authorized procedures in referring cases to him.

#### Patients Seeking Advice on Selection of Physician

In the course of duty the nurse will find individuals who require medical attention and have no physician selected. The nurse should urge such persons to seek medical care and give every assistance in seeing that it is obtained; however, she should not by any sign or statement indicate a preference for any physician. If she is requested to name a physician she must refrain. She may refer the patient to the secretary of the local medical society for further information.

#### Standing Orders - Special Orders

It is the health unit director's responsibility to establish working policies with the local medical profession. Local phy-

sicians may or may not formulate a code of standing orders. The intelligent nurse will learn the routine of the individual physician after giving service to several of his patients. Individualized patient care develops increased physician and patient confidence in the nurse's skill. Under such conditions the physician may withdraw standing orders and feel confident that the nurse can use her own initiative and efficiency without interference.

In situations where the patient needs special assistance or care the nurse may confer with the physician to obtain special instructions. Such instructions or orders should be followed completely insofar as general public health policy allows.

#### Reporting to Physicians

Local health unit policies vary, but in general a report, by telephone, correspondence, or in person, to the physician should be made in every case where a specific service is requested by the physician. The "Physician's Orders and Report Form, No. 8107" (explained in the Record Manual, pages 169-171), should be sent to the physician within twenty-four hours after a visit has been made. Reports should be brief and legible. They should show: Name of patient, address, specific and pertinent observations, such as, temperature, pulse, respiration, blood pressure, urinary findings, unusual symptoms, general condition, and a brief statement of what was done. In every instance where change in the patient's condition presents any problems, the physician should be notified promptly.

### Diagnosis

It is against the policy of the State Department of Health for a nurse to suggest a diagnosis in a case of any type. Nursing ethics prevent the nurse's questioning a physician's diagnosis, at any time, by word or act. If she has any questions or suggestions relative to a certain case she should discuss them in private with the unit director, the attending physician, or with both of them.

### Hospital Referral

It is not the place of any public health nurse to refer patients to a hospital. Such referrals lie entirely within the province of the attending physician.

### Service to Patients of Midwives

Patients of midwives should be carried for public health nursing supervision. Every effort should be made to teach midwives the importance and character of total maternity care. This service does not include public health nursing supervision during delivery.

### Disaster Service

The nurse should offer assistance in an emergency. In disaster work the nurse should render every possible assistance to the physician. Such services should be offered immediately to the person in charge. The local health unit director should approve the nurse's activities in this work.

### Maternity Care

Established policies are set up for maternity care activities in

each community; for example, when the unit director has cleared with the local medical society the nurse in her home visit may use stethoscope and sphygmomanometer for determining blood pressure, and she may carry out approved procedures for urine testing for her maternity patients.

### SUGGESTIONS FOR THE SUPERVISOR

#### Use of "Supervisory Field Visit, Form No. 8152"

Both supervisor and nurse should remain objective in their approach and consideration of the evaluation.

The report should be done after fatigue or any irritation of the day has passed. It should be written by the supervisor rather than having it typed in the office, since other people may misunderstand some of the statements made.

This is a confidential matter and discussion should be conducted in privacy between the supervisor and the nurse.

A quiet, uninterrupted place to talk is necessary.

Emphasis is placed where improvement is most imperative.

The staff nurse should evaluate her own work after she has had discussions regarding three supervisory reports.

A report should be made after a nurse has been on the job three months or more, and annually thereafter. A terminal report for each nurse is necessary when she transfers from one unit to another or leaves the service entirely. Copies of all of these reports should be made to appropriate individuals and written copies filed in the

proper personnel files.

Suggested Outline for Form No. 8152 for Supervisory Field Visit Report

Plan or Organization of Work as evidenced by: A program based on community needs; an effective method of planning work and distributing time; an individual plan for home, office, or school visits and for conferences; continuity of service; knowledge of agency policies and ability to interpret them; recognition of social problems affecting health.

Approach to Families and Others as evidenced by: Teamwork with the co-workers; development of satisfactory relationships with physicians, teachers, lay workers, members of community organizations; rapport with families and individuals in the home or in the office.

Nursing Technic as evidenced by: The kind of equipment carried and the manner of using it; an understanding of the principles determining technics; the utilization of opportunities to demonstrate nursing care.

Teaching Ability as evidenced by: Recognition of opportunities for teaching; resourcefulness in methods and the use of materials in her teaching; adaptation of instructions to the abilities, resources, and needs of those instructed; scientific accuracy of information given; insight beyond the immediate situation; effectiveness in stimulating an awareness of problems.

Approach to Families and Others

The nurse introduced herself by name and organization on each visit. She also introduced the supervisor as such. She explained to her first patient that she had been referred by Mrs. B., (a committee member).



Record Keeping as evidenced by: Understanding of the importance of accuracy, legibility, and completeness; use of the records in planning work, in evaluating accomplishments, and as individual teaching guides.

Appearance, Manner, Health, Professional, and Cultural Growth as evidenced by: Satisfactory professional and personal appearance; mental, physical, and emotional behavior; annual physical examination and attention to findings; the interest in improvement of nursing methods; the amount and type of professional reading done; the interest in further educational opportunities; participation in professional organizations; participation in community life; conformity of recreational activities with community mores.

Supervisory Field Visit (Sample)

Nurse: Mary Smith

Visits:

Date: February 1, 1949

1. Antepartum
2. Tuberculosis
- 3.
- 4.

Plan or Organization of Work

The nurse planned her visits before she left the office. She reviewed the patient's record and followed her plan for the next visit. She had her daily work plan in order. It included home visits in the Barnesdale community during the morning. In the afternoon, visits were made to physicians regarding patients and to schools for referrals. She planned her work to reduce travel to a minimum.

Approach to Families and Others

The nurse introduced herself by name and organization on each visit. She also introduced the supervisor as such. She explained to her first patient that she had been referred by Mrs. R., (a committee member).

Each of these families welcomed the nurse and asked many questions.

The antepartum patient invited the nurse to return soon. She promised to visit again in one month. The physicians whom she visited were friendly and cooperative. One of these referred three cases to the nurse.

### Nursing Technic

During the first visit the nurse gave instructions regarding antepartum care. She brought the bag into the house, but she did not open it.

In the home of the patient with tuberculosis, the nurse arranged her setup on the kitchen table after she had greeted the patient. She took the patient's temperature, pulse, and respiration. After a friendly word, she returned to the kitchen and cleaned the thermometer by rubbing a soapy sponge up and down the surface. Later, she demonstrated a method of turning the patient which would conserve the patient's energy and facilitate handling for the attendant. Next she reviewed instructions regarding care of respiratory excretions and the disposal of garbage by burning.

### Teaching Ability

In the antepartum visit the content of the nurse's teaching was sound and thought provoking.

In the tuberculosis visit the nurse had the husband return her demonstration of changing the patient's position. She gave her instructions clearly, in simple language, guided in part by the questions asked. She asked the husband to review for her all the instructions previously given regarding care and disposal of waste. The patient's sister does the cooking and housework and stays with the patient while the husband is away from home. The nurse did not give any instructions in her presence.

## Record Keeping

The nurse wrote her records neatly and clearly and she included information about the present situation, patient's problems, demonstrations, and instructions given. She uses a narrative style and writes out all the words in full.

## Appearance, Manner, Health, Professional and Cultural Growth

The nurse was poised. She was well-groomed in a regulation uniform. She appeared to be a happy and vivacious person in good health. She had a complete physical examination three months ago. She was careless about lunches, in that she did not make provisions for lunching when she was in the rural areas. Often she drank a coca cola in lieu of lunch.

### Strong Points

Personality well suited to work with public

Attractive appearance

Facility in achieving strong community cooperation

Smooth working relationship with physicians

Good execution of work plan

Adequate record keeping

### Suggested Improvements

Review thermometer technic

Practice principle of health teaching by planning for adequate noon meal

Seek and take advantage of every opportunity to demonstrate nursing care and to instruct members of the patient's family and all persons who are directly responsible for giving nursing care to the patient

Take advantage of the abbreviations for Nurses' Notes, Form No. 8583, listed in the Code Book

Signature Staff Nurse: \_\_\_\_\_

Signature Supervisor: \_\_\_\_\_

Date: \_\_\_\_\_

## PROGRAM PLANNING

Before any program of public health nursing service is inaugurated, some type of planning must be done. The home visit is considered the backbone of an effective nursing program. It is more time consuming than clinic or office visits, but is perhaps the most effective situation in which to promote health and to prevent disease. This is true because the nurse cannot only give undivided attention to the problems expressed by the individuals, but she can base her motivation on the observations she makes and the feeling tones she senses in the situation.

Some factors necessary in program planning are for the nurse to know the type and number of her weekly or monthly assignments, and to become familiar with the area she is to serve. She needs to look at the total district to determine how frequently she can schedule herself to be in a certain area on a specified date. On the basis of this plan, she makes appointments for visits to families, schools, other individuals, and agencies in the given community. This saves the nurse's travel time and enables her to serve more people in a given period of time. She is able to make appointments with some confidence of being able to keep them.

The case load in a given area will be influenced by the frequency with which the nurse plans to visit there. The case load could be increased by organizing clinic service in a community when demands indicate a need, and facilities and personnel are available.

Once the case load has been built up, the problem of selection of cases to be visited presents itself. Emergency calls will take

precedence over all others. In this category are those for care of the premature infant, acutely ill patients, where there is a need to demonstrate care to an attendant, and acute communicable disease cases, where quarantine or isolation factors are involved. (Section on Communicable Disease.)

In most health units visits to antepartum and postpartum patients and for care of newborn infants receive second consideration. (Sections on Maternal and Child Care.)

Likewise, in most health units chronic communicable disease cases, such as tuberculosis patients with positive sputum, or early latent cases of syphilis are the third group to be considered. It should be remembered that cases of primary and secondary syphilis are in the category of acute communicable diseases.

Preschool and school children with special problems should be given service prior to those who have not manifested any special problems. Most of the children in the school age group will have been referred by teachers or school officials. Visits to the schools for referral of cases may be spaced at intervals of two to four weeks, depending upon the total needs in the given community. In inaugurating the program it may be necessary to visit the schools more frequently in order to help teachers recognize children in trouble and to formulate immediate care policies with the school officials.

#### ORIENTATION OF THE NEW NURSE

The orientation period should be well planned for the graduate

nurse entering public health work if she works alone or without constant public health nursing supervision, and similar planning should be done for all nurses new to official city or county public health agencies in Texas.

It is assumed that employment of graduate nurses in units without public health nursing supervisors is given with the expectation that the nurse will receive the orientation provided by the Texas Public Health Training Unit in Austin. It is desirable for the nurse to spend an appropriate period of time in the local unit before she goes to the Training Unit.

The nurse's pre-employment interview with the employer should cover the following objects:

Financial arrangements for salary and car allowance

Leaves of absence, including, annual, terminal, sick, without pay for further education, or pregnancy

Merit System regulations

Set-up and various participants in the health unit budget

Overtime, daily rest periods, etc.

Pre-employment and annual physical examinations

Policies regarding uniform.

After her employment has been confirmed the personnel in the unit might be of some assistance to the new nurse in making arrangements for living quarters and in acquainting her with the available social, recreational, and educational facilities in the community.

Building Tour. On the first day the nurse should be taken on a tour of the building and introduced to all the unit personnel. She

should be assigned a desk, a nursing bag, code book, nurses' manual, city and county maps, and such articles as a ruler, red and lead pencils, calendar, paper clips, etc. She should be shown where the Record Manual is kept. The nursing and other educational supplies, and their storage space should be pointed out at this time. If the nurse's first interview has not included a discussion of goals of the whole public health program, the lines of authority -- through the supervising nurse to the health officer and on to the Nursing Division in the Central Office -- these should be explained at this time.

Files. In giving the nurse an overall view of office filing, it is well to leaf through the contents of the large files, noting where the drawers of active and closed family folders, the index cards, and other materials are, so that she may find them as the need arises. Later she should have a conference with the clerk regarding the filing system and procedures, details of office routines, etc. Some of the nursing correspondence may need to be scanned at this time. The remainder should be read later as time permits.

She might look through the filed copies of leaflets, pamphlets, etc. going back to read various health materials at a later date.

Manuals. Both the Record and the Nursing Manual should be discussed with the nurse. She should read parts of the Record Manual the first day. Especially pertinent at this time is the Section on Administrative Procedures, including: The Organization Chart, Services Obtainable from the Division of Local Health Services, Requisition of Supplies, Employment Records, Clerical Procedures, and Definitions and Instructions for Tabulating Health Department Services. In the Section on General

Nursing she should read from the Division of Public Health Nursing through the paragraph on Correspondence.

Record Forms. Some practice is important in facilitating the new nurse's use and understanding of the various record forms. She needs to be familiar with the details of the records before she uses them in recording services. A valuable experience in the use of records would be provided by setting up a family folder for a family fitting the following description:

Father with tuberculosis

Mother pregnant

Child under one year of age

Child with diphtheria.

First the family folder should be filled in according to instructions given in the Record Manual, and in turn all the records should be written up for this family. If further practice is necessary records pertaining to morbidity, school, and venereal disease services might be planned and completed in the same manner.

After the policies and procedures on maternity nursing in the Nursing Manual have been read the nurse should endeavor to record a home visit, keeping in mind what she observed, what she taught and demonstrated, and the leaflets on maternity care that she left with the patient. The record should always be signed. The tentative plan and date for the next visit may be put on the record or on the work card. The visit should be recorded with appropriate coding on the daily record.

At this point to prevent boredom and to familiarize the nurse with

technics she should begin practice on nursing procedures, such as bag technics, etc. If at all possible, reading, record survey, and practice of procedures in the office should be alternated with home visits and clinic work.

Work file. A survey of the work file should be made. If work cards are all filed back of current dates, about ten cards should be removed from the box and the corresponding family folders pulled. Each record should be reviewed and if a plan is not written on the case record, a decision about what is to be done at the next visit should be made and written on the work file card. The date for the visit is recorded on the work card and placed back of the date of the intended visit in the work box. The nurse should try to make only those visits for which technics have been read and procedures practiced. This method should be continued until the case load survey has been completed.

Practice Procedure. Using the Nursing Manual as a guide, practice should begin on technics that have to do with services in progress. For example, sometimes clinics are the main activity of the department, and if this is the case the nurse should read and practice everything in connection with the particular clinics. Nursing procedures in the following service areas are essential and should be learned as soon as possible:

Maternity -- antepartum and postpartum

Child -- all age groups including premature infants

Adult

Orthopedic

Communicable disease -- including tuberculosis and venereal diseases

Health education material. The nurse should look over the list of pamphlets that are available in quantities in the unit for her use in the various services. She should study them in order to use the material to best advantage in her home and clinic visits. It is best to avoid commercial pamphlets not specifically recommended by the supervisor or medical director.

Professional contacts. Careful preparation with the health officer, the local or state supervising nurse should be made before the local health and social agencies are visited. The community agencies, their personnel, objectives and functions should be discussed with the nurse soon after she comes to the unit.

Program planning. The activities of nurses are an integral part of the total health unit program. This should be kept in mind when the new nurse's program is being planned. It is usually difficult for the nurse to meet with groups at specified hours for extended periods of time; therefore, commitments of this nature should be given careful consideration. The help of a supervisor, either local or from the state office, should be obtained, if feasible, before a decision is made in such matters.

Reading is important for all nurses and particularly for the Graduate Nurse without formal education in public health nursing. The nurse should look over the minimum library list, and see what is available in the unit. She should read material relating to specific services ahead of time or just as soon as possible.

PROFESSIONAL OBLIGATIONS

It is felt that nurses will wish to assume their share of professional responsibility. This entails membership in the professional organizations. They should hold membership in and support as many of the following as is possible: The District Nurses' Association, Texas Graduate Nurses' Association, American Nurses' Association, State Organization for Public Health Nursing, National Organization for Public Health Nursing, the School of Nursing Alumnae Association, the Texas Public Health Association and the American Public Health Association. Those meeting the necessary qualifications should support the League of Nursing Education.

## SPECIAL ASSISTANCE FROM THE STATE DEPARTMENT OF HEALTH

### CONSULTATION

The Division of Public Health Nursing provides advisory and consultant nursing service for all phases of the generalized nursing program. Management of service, program planning, and organization of teaching units for various groups are some phases with which assistance may be given. The specialties, such as maternity, pediatric, orthopedic, tuberculosis, venereal disease, and hospital nursing, offer a concentrated service in these respective fields.

Medical consultation service from other divisions is available regarding communicable diseases including tuberculosis and venereal disease, cancer, maternal care, pediatrics, orthopedics, and mental health.

Nutrition consultant service is available through the Maternal and Child Health Division.

Consultation on public health dentistry is available through the Division of Dental Health.

Consultation on school health services is provided through the Division of School Health Services.

Health education consultation may be requested through the Division of Public Health Education.

Preplanning is an important item to consider when services of state personnel are anticipated. The problems at hand should be carefully considered and a tentative schedule for the state nurse

should be made. The plan should include home visits, clinic visits, conferences with local staff, and other services having a bearing on the area in which help is needed. Adequate time should be allowed for discussion and joint planning.

The state nurse will wish to confer with the nurse in charge and the medical director at the close of her visit, so that a verbal report of her findings may be offered.

It is helpful to keep in mind that the state nurse enters the local unit for the purpose of viewing services objectively and of offering suggestions which should make the task easier for the local nurse. Both state and local nurses are striving toward an improved family and community service.

### BIOLOGICS

Upon request, biological materials are supplied by the State Department of Health to directors of city and county health units and also to city and county health officers for use with indigent patients.

These include:

- Rabies Vaccine, Semple
- Smallpox Vaccine, Chorio-allantoic Membrane
- Typhoid-Paratyphoid A Vaccine
- Pertussis Vaccine, Plain
- Pertussis Vaccine, Alum precipitated
- Pertussis Vaccine, combined with Diphtheria Toxoid, Alum precipitated
- Diphtheria Toxoid, Plain
- Diphtheria Toxoid, Alum precipitated
- Diphtheria Toxin for the Schick test
- Diphtheria Toxin for the Control Test
- Schick Test and Control, combined package
- Old Tuberculin for Mantoux Test 1:100 and 1:1000 dilutions

Silver Nitrate Solution (1%) wax ampoule  
Sterile Triple Distilled Water  
Normal Dehydrated Blood Plasma\*  
Immune Globulin for Measles\*

### Storage and Use of Biological Products

Many of the biological products deteriorate rapidly if kept at room or higher temperatures. This is especially true in Texas where for most of the year the room temperature is exceptionally high. The method of determining the exact and accurate expiration date of a biological product is dependent on the temperature at which it is stored, so the storage temperature, particularly of such rapidly deteriorating products as smallpox vaccine and rabies vaccine, is highly important.

It is recommended that biological materials be placed in the refrigerator immediately upon arrival. (The smallpox vaccine is stored in the freezing compartment.) It is possible to set the ordinary household refrigerator to hold a temperature of 5° to 10° C. (41 0° to 50.0°F.) This will safely preserve the potency of the biological materials until the expiration date appearing on the label. Care should be observed to return all unused materials to the refrigerator after clinic use.

The use of products beyond the expiration date is not recommended. In some instances, as in rabies exposure, a life may depend upon the use of a fully potent vaccine.

It is suggested that in requesting biological products, reasonable

\* These two products are made available by the American Red Cross and will be supplied as long as they are obtainable.

judgment be observed in ordering only that amount of material which will be used within a short time.

Many biological products need a thorough mixing of the ampoule before withdrawing the required dosage. Be sure to observe the "shake well" rule when it appears on the label.

On account of the numerous opportunities for contamination and the possibility of subsequent infection, no portion of the biological products in a container from which the stopper has been removed should be kept for future use. It is advisable to use the whole contents at one time, unless great care and asepsis are observed in disinfecting the rubber stopper and in using a sterile syringe and needle when a portion of the contents is to be removed.

#### LITERATURE, FILMS, ETC.

Literature on many public health subjects is available from the State Health Department, upon request by the health unit director. The order blank, No. 1061, may be used to designate the material and the number of copies needed. If the desired material is not listed on this order blank it is suggested that a request by subject matter be directed to the division most concerned.

Local health units may borrow films from the Division of Public Health Education. Payment of round-trip express charges on the film is the only cost involved. A booklet, "Visual Aids in Public Health Education," lists films available for loan.

## NURSING EQUIPMENT

### WINTER UNIFORMS

#### Dress

The uniform is tailored, shirtwaist type, of navy blue silk, rayon, cotton, nylon or linen. Long or short sleeves may be used. White or pearl buttons or studs may be used to fasten the waist. The skirt should be a dignified length, so that it may fully cover the knees when sitting or standing. Hollywood, Butterick, and McCall make shirtwaist style patterns which may be used if desired. The official N.O.P.H.N. uniforms are approved styles.

Nurses while working in the clinic should wear white uniforms or Hoover dresses. They may also wear white smocks or aprons over their uniforms.

#### Collar

The soft white collar should meet in front when the neck of the dress is fastened. The neckline of the uniform should be fairly high.

#### Belt

The belt should be of the same color as the uniform and of an inconspicuous width. A plain, navy blue, kid belt with a plain, navy blue buckle may be used.

#### Handkerchief

A plain white handkerchief may be used with the uniform.

#### Coat

The coat should be tailored of navy blue or black cloth, without fur. If any trimming is used it should be of the same material. A

plain, navy blue or white scarf may be worn with the coat.

#### Hat

The hat should be plain, navy blue or black. White may be worn in the summer. Feathers or contrasting colors should not be worn.

#### Shoes

Navy blue or black shoes are used in winter. White shoes may be used in summer if desired. They should be wide enough and long enough, with a straight inner border and a counter that gives support. There should be some type of support across the instep to prevent the foot from being crowded down into the toe of the shoe. Sensible heels are recommended.

#### Jewelry

This is restricted to class pin or class ring and a watch. Wedding ring may be worn.

#### Cosmetics

The use of sufficient rouge and lipstick to look natural is permissible. Nail polish may be used discreetly if desired. Vivid tones of polish should be avoided.

#### Care of Uniforms

White accessories should be kept clean and neat. Each nurse should have enough uniforms to change them frequently.

#### When to Wear the Uniform

The full uniform should be worn while the nurse is on duty, including Saturdays. When she is a representative of the agency at business luncheons or other community functions she should wear the full uniform.

The nurse is seen more often in uniform than in any other attire, therefore, her appearance at this time should warrant as much consideration as her appearance in any other type of dress. Good grooming is an asset to any nurse.

### SUMMER UNIFORMS

It would be difficult to find a summer uniform that would be suitable to all nurses, therefore, the following regulations have been suggested to be effective annually, April 1 through September 30.

#### Dress

Simple, tailored, wash dresses are permissible for duty. Two-piece cotton dresses may be worn, but skirts and blouses of different colors are not acceptable. Unit nursing personnel wishing to adopt a regulation summer uniform may do so, selecting their material and designing their pattern. Nurses who transfer from one unit to another should not be expected to buy new uniforms provided the ones they have are in good condition. The navy blue dress is acceptable for summer wear unless a local nursing staff wishes to make other stipulations. In any event the nurse should make plans in advance for her winter uniforms.

#### Shoes

In selecting shoes for wear with the summer uniform one should still keep in mind proper support of the feet, and suitability for wear with this type of dress.

#### Hose

Depending on local mores, hose may be omitted. Ankle socks are not permissible at any time while on duty, either with the winter or summer uniform.

### Hats, Purses

Hats and purses should be of a simple, tailored style, suitable to the dress being worn.

### Jewelry, Cosmetics

The usual recommendations concerning jewelry, cosmetics, etc. as outlined for the regulation uniform, are also in effect for the summer uniform.

### NURSING BAGS

The nursing bag, with its non-expendable contents, is the property of the State Department of Health or of the county. Each nurse is responsible for the condition and adequate contents of the bag which she uses. She should leave it in as good condition as when she received it. It should always be kept clean inside and outside. If it is placed on the floor of the car a clean newspaper should be put under it. Complete equipment is kept in this bag at all times, except when in use or during cleaning. Lost, broken, or stolen articles should be replaced by the unit.

When the bag is left in the car for any reason, the car should be locked, as drug addicts or other persons frequently steal bags, apparently hoping to find narcotics.

### RECORD CASE

The record case should contain: individual and family records, code book, fountain pen, and pencil. Blank record forms should be carried. A supply of literature on public health subjects is kept in a brief case,

portable file, or box in the nurse's car. Literature to be used in a home visit should be carefully selected and placed in the record case just prior to the home visit. If the literature is not left in the home, it should be returned to its proper place, and materials appropriate for the next visit should be selected and placed in the record case.

### DEMONSTRATION MATERIAL

Special demonstration material, such as oil can technic equipment, infant layette, suitable patterns, etc. are part of the field equipment.

## HOME VISITING

### COURTESIES

On the first visit to a home the nurse should introduce herself, identifying the agency which she represents. If uninvited, she should put the householder at ease by showing interest in the children, flowers, garden, chickens, etc. At this point, if the host has not asked for, or stated the assumed reason for the visit, the purpose is made known as simply as possible. From this point on, mutual interest should increase and rapport become established.

Direct questions of a probing nature should always be avoided. The Golden Rule is a good thing to remember. Indirect questions which indicate sincere interest will provide the nurse with a fund of knowledge about the family. Much information about the situation can be gained by simply listening; by finding out what the patient and his family know about the matter under discussion; how they feel about it; and what interests them most in health conservation. It will pay dividends if the nurse starts with what the patient knows, and builds on his interests.

Only the service which the family is able to accept should be emphasized. On each visit some service in keeping with the family's abilities and needs should be rendered. During the first visits the nurse may feel this service is insignificant in the light of the total family needs.

### RECORDING

The importance which the nurse accords a family or an individual

record represents the importance she accords the family or the individual. To illustrate: If a record is lost or misplaced, or if work cards are not kept in the work box, back of the proper dates, patients are forgotten. Clinic appointments are lost sight of, and home visits are not made. Without the nurse's knowledge, antepartum patients become postpartum patients, and infants become preschool children. All this because the nurse failed to appreciate the fact that a neglected record may mean a neglected human being.

Records should be used overtly only after the nurse has established some sort of relationship with the family. She then explains the use made of the record before recording information in the family's presence. The nurse must use discretion in safeguarding confidential information.

The following should be recorded at the time of each home visit or immediately afterwards: Significant facts regarding the patient, suggestions made by the nurse, services rendered, demonstrations given, pamphlets left in the home, and accomplishments of the family as a result of the nurse's teaching. A tentative plan and date of the next visit are arranged at this time.

Recording of dates, temperatures, weights, etc. should be done in the home. Information which might be misinterpreted should best be written outside the home, but as soon as possible following the visit. If the nurse waits until she returns to the office to record the bulk of the visit content she finds herself hopelessly behind, and much recording is never done. Social and economic data should be brought up to date every six months or at the time significant changes occur.

Too much information on a record is better than too little. The new or inexperienced nurse should write full records and seek the help

of supervisors or state consultants in improving the content and the method of recording.

### EMERGENCIES

The word emergency is used arbitrarily to denote a sudden change in plans necessitated by conditions found in the home. For example, when the nurse calls to make an antepartum visit and finds her patient upset over her husband's illness, the first concern would be to ascertain the husband's condition. She should do what seems necessary for the husband and allay the wife's fears. This does not mean that the nurse allows her plans to be changed by everything that happens in the family. It does mean that any nurse should give sympathetic understanding and help, when possible, with whatever most concerns the family. It also means that when illness is encountered in an individual other than the person planned for, it should be given attention. No person can profit from the best instructions if given at a time when he or she is disturbed over the sickness or trouble of another family member.

### NURSING BAG

The nursing bag, adequately equipped, is a valuable teaching tool when it is properly used. The bag should always be taken into the home when a visit is made. There are few visits in which the bag cannot be used. This can be readily understood when the nurse realizes the necessity for handwashing as a means of controlling the spread of disease and illustrating health teaching.

## CLINICS

The need for clinic service should be demonstrated to the community before a clinic is organized. The unit director, with the nurse's assistance, should accumulate the facts demonstrating the need. They should outline the objectives of the service to be offered.

## PHYSICAL SETUP

The primary function of any clinic is service to patients, regardless of whether treatment, prevention, or education is involved. Therefore, individualized patient care approaching as nearly as possible the care provided by the private physician should be planned for the clinic situation.

The location of the clinic depends upon the facilities available in the community. In selecting the space, hazards to safety and health should be considered. A clinic functions better in permanent quarters where equipment can be adequately care for and stored, rather than where supplies must be transported to and from the clinic each session. Sufficient equipment, in good condition, is essential for a well-functioning clinic.

If a health center building is available, this would be the choice site for the clinic. Clinic quarters should be clean at all times attractive, well-ventilated, and preferably on the ground floor. Steps leading to the clinic should be safe and provided with a handrail, when an upper story must be used. Hot and cold running

water, proper heating and lighting, and outlets for electrical appliances are essential for all clinics.

The minimum space provided for a clinic should include, reception or waiting room, physician's consultation and examining room, with lavatory or sink, dressing room, class and demonstration space, sanitary and private toilet facilities, and a utility room. It is desirable to provide space for supervised play when children must wait during clinic sessions.

The reception and waiting room may be combined and utilized in various ways. Space for the receptionist's desk, filing cabinets, comfortable benches, and chairs of appropriate size for children and adults must be provided. The allotted space should be sufficient to allow for segregation of races if necessary. Space for private interviews is essential for any clinic. When this space must be improvised, partitioning should extend from the floor to the ceiling to insure privacy.

#### EQUIPMENT

The equipment essential for a clinic would include:

##### REGISTRATION SPACE AND WAITING ROOM

Table or desk  
Chairs  
Files  
Wall thermometer  
Waste basket  
Pen staff and points  
Pencils  
Ink

##### CLASS AND DEMONSTRATION AREA

Tables  
Chairs  
Waste basket  
Blackboard for classes  
or announcements  
Wall thermometer

EXAMINING AND TREATMENT ROOM  
(CONTINUED)

Tourniquet  
Otoscope  
Percussion hammer  
Sphygmomanometer  
Adhesive tape  
Absorbent cotton  
Bandages, assorted sizes  
Sterile gauze  
Alcohol  
Vaseline, white  
Containers for medications,  
and solutions  
Tongue depressors, applicators,  
cotton balls in covered containers  
Laboratory blanks, containers,  
slides, specimen bottles  
Pen staff and points  
Pencils  
Ruler  
Blotters  
Paper clips  
Rubber bands  
Notebook  
Scratch pads  
Health literature

TOILET

Table or shelf  
Waste basket  
Towels and container  
Soap  
Toilet paper

UTILITY ROOM

Table or shelves  
Waste basket  
Receptacle for soiled linen  
Wall thermometer  
Laboratory or hand basins  
Soap (liquid and bar)  
Paper towels  
Electrical sterilizer or hot  
plate  
Handling forceps, container  
Some type of refrigeration  
Closets or cabinets with locks  
Demonstration material (toys,  
clothing, food, etc.)  
Supplies, including:  
Aprons  
Sheets  
Towels  
Paper napkins  
Paper drinking cups  
Paper bags, assorted sizes  
Laboratory blanks  
Containers  
Slides  
Specimen bottles  
Safety pins, assorted sizes  
Pencils  
Rubber bands  
Scratch pads  
Notebooks  
Hammer  
Nails  
Thumb tacks  
Newspapers

All supplies should be kept in adequate, locked closets or cabinets when not in use. Replenishment of all needed supplies should be made before the next clinic session.



## CLINIC PERSONNEL

A division director or a health unit director usually holds a nurse responsible for the management of a clinic. She should participate in the selection of personnel, and she should instruct and supervise non-professional workers.

The best nursing practices are expected to be used. Rigidly aseptic technics for preventive and therapeutic measures should be carried out in the clinic. Scientifically proven procedures for clinical tests and examinations should be adopted and evaluated periodically by the medical and nursing administrators. Gentle and skillful handling of patients, attitudes of good will and constructive helpfulness will contribute to the patient's ability to receive maximum benefit from the clinic services.

A list of functions for each worker should be set forth in writing. This will prove helpful to physicians, nurses, and aides in the event of absence of the regular clinic staff members and in introducing new personnel.

A major function of the public health nurse in the clinic is educational, and her activities should be considered in this light. Purely routine and non-educational tasks should be delegated to aides wherever possible. This releases time for the nurse to devote to conferences, classes and other means of instructing the patient.

The selection and placement of appropriate exhibit and demonstration material in the clinic should be done by the nurse before the clinic session begins, to reinforce previous discussion on medical re-

## CLINIC PERSONNEL

A division director or a health unit director usually holds a nurse responsible for the management of a clinic. She should participate in the selection of personnel, and she should instruct and supervise non-professional workers.

The best nursing practices are expected to be used. Rigidly aseptic technics for preventive and therapeutic measures should be carried out in the clinic. Scientifically proven procedures for clinical tests and examinations should be adopted and evaluated periodically by the medical and nursing administrators. Gentle and skillful handling of patients, attitudes of good will and constructive helpfulness will contribute to the patient's ability to receive maximum benefit from the clinic services.

A list of functions for each worker should be set forth in writing. This will prove helpful to physicians, nurses, and aides in the event of absence of the regular clinic staff members and in introducing new personnel.

A major function of the public health nurse in the clinic is educational, and her activities should be considered in this light. Purely routine and non-educational tasks should be delegated to aides wherever possible. This releases time for the nurse to devote to conferences, classes and other means of instructing the patient.

The selection and placement of appropriate exhibit and demonstration material in the clinic should be done by the nurse before the clinic session begins, to reinforce previous discussion on medical re-

commendations. Material on health education for distribution to patients should also be chosen carefully.

During the clinic session interviewing of patients is done both preceding and following the medical consultation. For new patients this interview will include a medical and social history, and an interpretation of the purpose and procedure of the clinic.

### Suggestions for Preclinic Activities

#### Nurse

Reviews records  
Makes notations regarding patients' questions and problems  
Selects and places exhibits, demonstration material, and reading matter

#### Aide

Puts rooms in order, if necessary  
Supervises ventilation, heating, and lighting  
Prepares for sterilization of solutions, instruments, syringes, gloves, etc.  
Places the above articles in sterilizer and removes them after they have been sterilized  
Distributes and cares for linen  
Sets up examination tables, trays, drugs, solutions, test material, and temperature equipment  
Prepares dressing rooms  
Prepares play space for children  
Supervises facilities for taking specimens  
Supervises toilet facilities  
Greet patients as they come in and makes them feel at home  
Registers patients, filling in name, address, age, sex, on all record forms

Suggestions for Activities During Clinic

Nurse

Aide

Manages clinic, makes assignment of work if necessary  
Takes medical, social, and interim histories  
Explains clinic procedures and service to new patients  
Observes, records, and reports to physician any signs of illness, especially in children  
Introduces patients to the other workers  
Conducts group conferences  
Prepares for examinations, treatments  
Assists with examinations, if necessary  
Arranges referrals to other clinics, hospital, physician, other agencies, etc.  
Gives and records nursing conference after examinations and treatments  
Reviews with the doctor his recommendations, and plans for carrying out these recommendations  
Gives return appointment to clinic  
Uses visual aids, exhibit material, and reading matter with both individual and group conferences, as feasible

Admits patients  
Takes records from file  
Transfers records from one clinic worker to another  
Makes appointment cards and schedules  
Directs patients to dressing rooms, examining rooms, and laboratory

Suggestions for Activities After Clinic

Nurse

Aide

Reviews records for completeness  
Reviews appointment cards  
Selects patients for home visits  
Makes referrals

Files cards and records  
Makes out report of clinic  
Puts room in order  
Disposes of soiled linen  
Cleans trays, tables, instruments, gloves, syringes, etc.  
Refills containers with solutions, water, soap, alcohol, cotton, for temperature trays  
Checks appointment cards  
Checks syringes, needles, etc.  
Closes windows  
Prepares list of needed supplies, and delivers to proper person  
Puts everything away in cabinets  
Locks building

## PATIENT CARE

The general atmosphere of a clinic should be pleasant and immediately discernible to the patient upon entrance into the clinic. Frequently, ill manners, rudeness, or disregard of a patient or her time are contributory factors in her failure to return to the clinic. All patients should be treated with respect and courtesy.

The nurse should tell the patient something about the type of examination which will be done. She should also explain the necessity of providing adequate information during the interview. The past and present illness of the individual and her family, the past and present problems encountered in promoting healthful living for each family member influence the recommendations for present care of the patient.

All necessary equipment required for a physical examination should be checked for cleanliness and assembled previous to the examination. It is difficult for the physician to do a good examination unless everything is readily accessible. The nurse is responsible for providing adequate assistance during the examination. Competent help at this time does much to promote smooth functioning of the clinic. It eliminates loss of time for both the physician and the patient. It increases the quality of service to the patient, with consequent satisfaction to all concerned.

The patient should be prepared, suitably dressed and draped, for the type of examination the physician will make. The nurse should assure the patient that she will be chaperoned during the examination. The nurse, herself should assist with the examination if this is indicated.

Prior to the examination, the nurse should learn something about the individual and her family; to understand why the patient came to the clinic; to determine what difficulties were involved in coming; what the patient thinks of the clinic; and to estimate what the patient will be able to accept from clinic service. These pertinent facts will be useful to the nurse and the physician in rendering service to the patient.

A physician-nurse conference may be necessary. If so, it precedes wherever possible, the final interview of the patient and the nurse. This may help the nurse to convey to the patient in simple, understandable terms, the physician's orders, and suggestions about carrying them out.

The conference following the examination enables the nurse to interpret the physician's recommendations about treatment and follow-up in the home. At this time she should attempt to learn what the patient thinks of the clinic services. If a follow-up visit is deemed necessary, an appointment for the visit is made. Referrals are also made at this time.

If referrals are necessary, the nurse should make them as promptly as possible. It is necessary to give the physician or the agency pertinent facts concerning the patient's present illness and something of the patient's general background. The nurse may give this orally or in writing, depending on the clinic policies regarding referrals.

#### EDUCATION

Some of the methods of instructing patients in the clinic are;

interviews, classes, and conferences.

An interview refers to a meeting of two persons, usually the nurse and patient, to discuss pertinent questions, problems, and facts relating to health and well-being.

A conference refers to the arrangements made for assembling well individuals at a specific place and time to receive certain medical and nursing services, or nursing services only.

A class refers to a group meeting which provides an opportunity for the leader and class members, meeting regularly, to discuss the problems and interests common to the group. The class is planned in advance with everything ready to start promptly.

Lesson outlines should be tailored to fit each clinic. No overall plans for lessons in the conferences or classes are available. The nurse may, however, request assistance from the Texas State Department of Health, Division of Public Health Nursing, when planning for specific groups.

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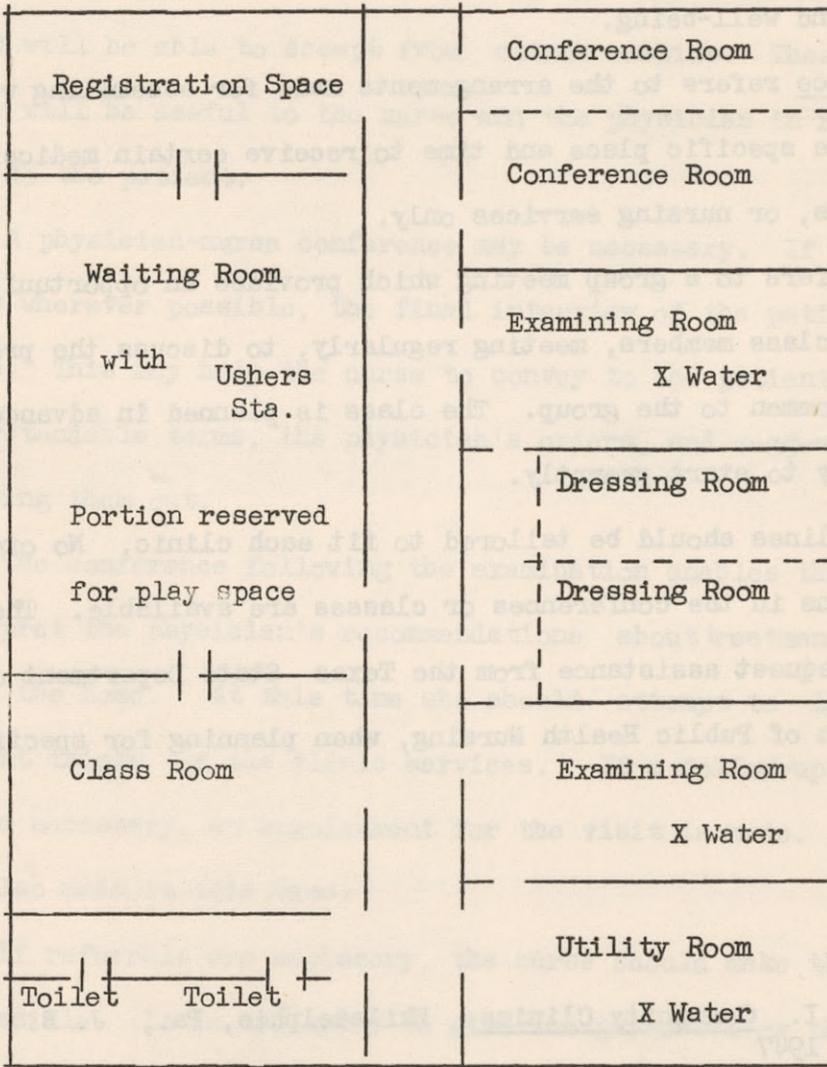
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DIAGRAM OF SUGGESTED FLOOR PLAN FOR CLINICS



This plan has been made with consideration for minimizing steps. The rooms are designated in the sequence in which they are ordinarily used in clinic service. Adaptations can be made as necessary, but space for each activity indicated should be provided and plans should always be made to promote the most efficient routing and to prevent unnecessary steps caused by doubling back of patients and workers. Consideration should always be given to the placing of conference and examining rooms in the quietest spaces available without sacrificing reasonable nearness to waiting rooms.

## RECORDS

Record keeping in the field of public health nursing is a vital part of the service rendered. The nurse is responsible for much of the information written on a record. Complete and orderly recording, in a legible manner, of significant information and services rendered to a patient is essential for insuring continuity of the patient's care and for evaluating all services accomplished. A record must be written, so as to carry an overall view of the situation to the reader who has had no first hand knowledge of the case.

Nurses do all of their recording in ink, either in the clinic or in the home. There are exceptional times, however, when according to the judgment of the nurse, records should not be written in the home. In recording service consider each of the following points:

The condition found, including the physical, emotional, mental, and social status of the individual, insofar as the nurse is able to observe. An objective statement of observations is the most effective way of recording these data.

The family assets and liabilities, including physical, emotional, and social factors, which have such an influence on the development of each individual in the family. Examples: Civic-minded parents, stable and outgoing mother, divorced parents, highly emotional mother, chronic illness in other family members, etc.

Facilities found in the home, such as beds, food available, etc. A summary of the type of care which is now being given to the individual concerned.

Nursing service rendered, including bedside care given, demonstrations of nursing procedures, feeding procedures, and the like. Oral instructions and demonstrations should be recorded in specific terms, for example: "Begin orange juice, one teaspoonful diluted with one teaspoonful of boiled water, by spoon feeding. Amounts to be gradually increased to one tablespoonful by the end of the week, if child tolerates this food well." Statements such as: "Instructions regarding diet were given." have little meaning to persons other than the one doing the recording, and it is better to avoid such general statements.

The action taken by the family in regard to previous instructions, and their attitude toward the service being given.

All entries should be properly dated (day, month, and year) and signed by the recorder. In some instances records may assume a legal aspect. Records may be used to safeguard the patient, physician, or nurse, if law suits or accusations develop.

#### Value of Records

##### To the individual

By providing a complete record of patient care, the quality of health service may be improved.

By supplying an accurate account of significant health data to the physician, diagnosis and determination of treatment are facilitated for the patient.

By eliminating the necessity for repeating diagnostic studies upon transfer from one service agency to another, the patient is saved time, money, and effort.

### To the nurse

By supplying an account of services rendered to the individual and his family, continuity of service is made possible. Nurses are transferred from place to place and patients move from district to district. Patients should be cared for efficiently whether the same nurse sees them or not. If a new nurse takes charge of the case, it is only reasonable to expect that she need not go through the routine of obtaining the patient's history from the beginning. It is also essential that the family should not be asked questions which have previously been asked and answered.

By reviewing the total health picture prior to each visit the nurse can best plan for future action. This review reminds her of what is being done, as well as what is left undone. It is not possible for the nurse to carry in her memory the condition of her patient and his family, the social history which bears upon the health of the family, the care and instructions given in the previous visits, nor the gains made in this service. A written account eliminates the necessity for dependence on memory and thereby promotes accuracy.

By evaluating the teaching methods, nursing technics, and scientific information which the individual nurse employs in her work, the supervisor can determine needs in supervision, counseling, and in-service education for the staff.

By serving as a reminder of all the factors affecting the health

of the family, the inexperienced public health nurse, in particular, is benefited.

#### To the Organization

By providing a form of indispensable bookkeeping, those in charge of the work are enabled to see whether or not the organization is fulfilling the purpose for which it was intended.

By helping to show how the organization is meeting the needs of the community, and where further development is desirable.

By contributing valuable data, medical and nursing research is furthered.

#### To the Community

By revealing the areas of greatest health needs, the community is enabled to consider first problems first.

By pointing-up the social as well as the etiological causes of illness, methods of control can be planned effectively.

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## TECHNICS

### NURSING BAG TECHNIC

The nursing bag technics are developed so the nurse may work more effectively and more rapidly. They should be used to prevent the spread of infection, to aid in teaching members of the household served, and to conserve the nurse's time, so that her work may be more effective.

Packing the nursing bag in the same way each time following use of its contents makes for efficiency and saves time.

#### Care of the Bag and Contents

Every effort should be made to keep the bag fastened, and the interior of the bag and its contents clean. Purse, gloves, records, etc., should never be carried in the bag. Extra newspapers and newspaper bags may be carried folded flat on top of the bag between the flaps and the outer cover.

Supplies should be checked and replenished daily. Solutions should be renewed once a week. Clean apron and cases should be supplied daily, or as often as necessary. The lining should be changed or cleaned as frequently as indicated.

Bottles should be neatly labeled. "Poison" labels, in addition to the usual labels, should be used as necessary.

#### Bag Contents

The following list of articles is a basic part of the bag. In certain instances additional contents are approved; these will be explained later.

Scissors

Thumb forceps

1 pair of hand spring baby scales

Cord tie and 3 cord dressings

1 mouth thermometer

2 axillary or rectal thermometers

1 small tube vaseline

Chain of safety pins, 3 large, 3 medium, 3 small

Bottles of alcohol; antiseptic, green soap, hand lotion, placed in the loops of the bag lining

8 hand washing set-ups, each consisting of 4 paper towels, 2 tooth picks, 2 paper napkins and 1 brown paper bag

2 aprons of brown wrapping paper

2 Dixie cups

Muslin bag containing: 1 two-inch bandage, 1 roll adhesive tape, 8 tongue depressors wrapped in a paper napkin, 8 applicators wrapped in a paper napkin

Cotton balls in a muslin bag

1 tube shaving cream (type that will produce a lather when wet)

8 clean newspaper sheets.

When the unit medical director has cleared with the local medical society, the following equipment may be added for giving home service to maternity or other patients:

A muslin bag containing a stethoscope, a sphygmomanometer in

its muslin case, 6 paper napkins for arm cuffs.

Urinalysis equipment: test tube, test tube holder, 3 extra paper cups, and Esbach's Solution, Albumin Test, or other approved test solutions for albumin and sugar.

### Procedure

The bag is placed in a suitable area in the home. A table, trunk, or dresser is preferable. The bag should not be placed on the bed or the floor. The bag is set on one of the newspaper sheets carried between the inner flap and the outer cover of the bag. Large sheets may be used if desired. The large full-sized sheet is folded in the center, paralleling the longest dimension, then fanned and folded to fit between the inner flap and the outer cover of the bag.

The coat, folded with the lining inside is removed and placed on a chair away from the wall. The hat is placed, top down, on the coat. The sleeves of the uniform are rolled up. The outer flap of the bag is opened and attached to the handle of the bag. The newspapers, carried between the outer and inner covers of the bag, are placed behind the bag. They will then rest on the handle below the turned back bag cover. When a newspaper bag is needed, it is made at this time.

The hand washing set-up, which is just below the inner cover of the bag, is taken out. A waxed paper cup, packed near the top of the left hand side, is also removed at this time. The inner cover is closed. The set-up is unfolded and the paper napkin is spread out on the newspaper. The waste bag is placed in an upright position in a convenient spot near the set-up.

An adequate amount of shaving soap is squeezed on the hands. One

toothpick and one paper towel are taken, and the towel is secured under the arm in going to the bathroom, kitchen, or wherever the hands can be washed. The hands are washed carefully, using a toothpick to clean under the nails. Running water is used if available, otherwise someone is requested to pour water over the hands. The hands are rinsed carefully and dried with the paper towel. If the waxed cup was used, the attendant is requested to refill it with water, being careful not to touch the inside of the cup. The set-up must not be touched as the attendant places the cup there. The used paper towel is placed in the waste paper bag.

The nursing bag is opened. The apron is taken from the bag leaving the case on the outer cover until the other equipment is removed from the bag. The apron is unfolded and put on. The side folded in is always the outside of the apron and likewise, when the apron is removed, the outside is folded in. All articles necessary for the visit are removed and arranged on the napkin, which was folded around the hand washing set-up. The extra napkin in this pack may be used to enlarge the space as needed.

Paper aprons are worn for all communicable disease visits. This includes visits to tuberculosis patients with positive sputum and visits to patients with a venereal disease, if there are lesions or a discharge of any kind. Paper aprons are discarded and burned with other waste at the end of a visit.

The inside cover of the bag is again closed, after all necessary equipment for the visit is arranged on the set-up. The outside cover will need to be closed only when there are obvious dangers of contamina-

tion of the bag, such as flies in the home. If the outer cover of the bag is closed, it will be necessary to wash the hands again before handling the equipment and giving service to the patient.

The bottles of alcohol, approved antiseptic, green soap, and hand lotion need not be handled except with clean hands before the service is given, and again as the bag is being repacked. Sponges of alcohol and sponges of green soap or shaving soap, can be moistened and made ready for cleaning equipment before the service is given. Avoid saturation of the sponge because of the damage alcohol, and even water, may cause to furniture. All bottles except the one containing hand lotion, should be recapped promptly after the necessary sponges are ready. This avoids spillage and decreases evaporation of the solution. Equipment, such as scales and the bell and ear plugs of the stethoscope should be cleaned with an alcohol sponge after use and before being repacked in the bag.

All equipment should be cleaned, except for the final alcohol wipe, before it is placed on the set-up, after it has been used.

The hands are washed thoroughly. The equipment is wiped with the alcohol sponge, and placed in the bag. The inner flaps are closed; extra newspapers are placed on top of these flaps and the outer cover to the bag is fastened.

All waste sponges, towels, and applicators are discarded in the paper bag as they are used. This paper bag, along with the newspaper, under the bag is burned just as the nurse departs. This burning should be observed when visiting a communicable disease patient. Waste accumulated in serving well patients may be placed in the family waste basket or the receptacle used by the family for other waste materials.

When the nursing bag is taken into the home of a communicable disease patient, special care should be taken to protect it from contamination. The bag is set-up in a room other than the one occupied by the patient. The nurse's coat, hat, record case, etc., are also left outside of the patient's room. A chair is protected with newspapers before the hat and coat are placed there.

The nursing bag technic usually includes taking the patient's temperature. Blood pressure determination and urinalysis are also included in areas where the medical society has approved these procedures as part of a home visit.

#### THERMOMETER TECHNIC

The axillary method for checking temperatures is used on all children unless the physician has requested another method. Either mouth or axillary method is used on adult patients.

Thermometers are carried in dry test tubes with rubber stopper or in a "Stanley Steritube" in the nursing bag. The mouth thermometer is always carried in its case, in the center loop, on the opening side of the nursing bag. Thermometers used for axillary or rectal temperatures are carried, one on either side of the mouth thermometer, in the loops provided in the bag.

The Dixie cup is filled about two-thirds full of cold water. Five cotton balls are taken from the nursing bag, two for green soap, two for plain water, and one for alcohol. These dry cotton balls are grouped in convenient places on the set-up, and cotton balls are moistened with

soap, alcohol, and water as indicated. Over-saturated cotton balls will deface furniture and penetrate the paper readily.

The thermometer is taken from the bag, leaving the test tube and stopper in the bag. The mercury is checked to make sure the reading is 96 degrees or less. One of the cotton balls moistened with plain water is used to cleanse alcohol from the thermometer. The thermometer is held bulb downward, over the waste bag and is rotated slowly so that all the surface is cleansed.

The parent or the patient removes any restricting clothing. Accumulated moisture is removed from the underarm by the parent or patient before the thermometer is placed there. For temperature taken by axilla, the thermometer is left in place for five minutes. For temperature taken by mouth, the thermometer is left in place for three minutes. Pulse and respiration are checked at this time.

The thermometer is removed, read, and the mercury is shaken down. The thermometer is then cleaned with two soap sponges. It is rinsed with a wet cotton ball and cleansed with an alcohol sponge. The clean thermometer is placed on a clean portion of the set-up until the nurse's hands have been washed.

In relation to clinic services certain modifications of this thermometer technic must necessarily be made. The same basic principles of cleanliness and prevention of cross infection are observed. Here, as in the home, care is exercised in keeping the mouth and the rectal thermometers separate. It is recommended that each thermometer have a separate container. The use of test tubes is an inexpensive means of meeting this requirement.

In the clinic situation, as in the home visit, the thermometer is wiped with a pledget of cotton dipped in clean water before it is used. It is cleansed with soap, water, and alcohol after being used.

### BLOOD PRESSURE TECHNIC

All necessary equipment is removed from the nursing bag, and arranged on the work area. The sphygmomanometer should be carefully handled because of the delicate mechanism of its parts.

The patient assumes a comfortable position. She may either sit or lie upon the bed or couch during this procedure. The purpose of blood pressure determination is explained, while the preparation is in progress. All constricting clothing is removed from the left arm. A paper napkin is applied well above the elbow to protect the rubber cuff or apparatus. The cuff is applied so the rubber tubes will fall on the inner side of the arm above the elbow, thus the pressure is above the brachial artery.

The stethoscope is placed in position, with the bell at the point where the brachial artery can be felt beating, at the inner side of the elbow. The bag is inflated until the pulse ceases or until all sounds heard through the stethoscope cease. The air is let out of the cuff slowly and the dial is read at the moment the pulsation is heard through the stethoscope. This marks the point for reading systolic blood pressure. The air is slowly released until the sound disappears. The dial is read for diastolic pressure at this point. The patient should not be wearied with this procedure. If a second reading is needed for certainty,

it would be well to wait at least two minutes before the cuff is re-inflated. The patient should be in the same position each time the reading is taken, for a different position may change the reading. If the reading is high on the first taking, it is advisable to repeat the procedure near the end of the visit as the patient may have been nervous or alarmed.

The bell and ear plugs of the stethoscope are cleansed with an alcohol sponge before returning it to the case. The sphygmomanometer should be packed carefully in the case provided, and carried in the nursing bag, just under the apron case.

A written report of the blood pressure reading should be sent to the patient's private physician following each visit.

#### URINALYSIS TECHNIC

It is preferable to do the urinalysis the latter part of a visit. For Esbach's Method the patient is asked to take a paper cup, go to the bathroom, cleanse the vulva, and void into the specimen cup. The urine is poured from the cup into the tube, until it is half filled. Fifteen drops of Esbach's Solution are added to the urine. The test tube is held at eye level. If the urine is cloudy, albumin is present. This is usually estimated at 1 $\frac{f$ , 2 $\frac{f$ , 3 $\frac{f$ , and opaque, or 4 $\frac{f$ . The waste urine is disposed of. The utensils are rinsed under cold running water, then washed with soap and water before being replaced in the nursing bag.

A written report of the urinalysis should be sent to the patient's private physician following each visit.

Minor changes in the equipment used and resulting changes in technique from those described here may be permissible, but technics must be basically safe and the equipment adequate for the service to be rendered. Deviations should be discussed with the field supervising nurse during a supervisory visit.

### BREAST CARE

The principle objectives of breast care are: cleanliness; support of the breasts to prevent tissue damage, and to keep the breasts from becoming pendulous; and protection of the sensitive delicate tissue of the nipples.

#### Antepartum Breast Care

##### Equipment

Mild soap and soap dish

Soft wash cloth

Soft, absorbent towel

A good supporting brassiere

##### Procedure

The breasts and nipples are washed gently with mild soap and warm water and rinsed well. They are patted dry with a gentle motion. A good supporting brassiere is applied, taking care that the shoulder straps are adjusted to give the breast adequate support. Special orders should be obtained from the physician if the nipples become unduly tender or encrusted. Massage or rough handling of the breasts and nipples should be avoided.

## Postpartum Breast Care

Equipment. The same as for antepartum care.

### Procedure

The breasts and nipples are bathed each morning with a clean cloth, mild soap, and warm water, rinsed well, and patted dry. The supporting brassiere is applied. Binding should be avoided. The nipples should be cleansed with clean cotton pledgets and tap water before and after the infant nurses. The mother should wash her hands before this procedure.

The breasts should never be pumped or massaged unless this has been ordered by the physician. Special orders should be obtained from the physician if the nipples become fissured or unduly tender. The baby is put to breast as ordered by the physician.

The organism causing thrush in the mouth of a baby may also be found in the vaginal tract of the mother. One way to prevent thrush in the newborn is to teach the mother the importance of washing her hands carefully before giving herself breast care.

## PERINEAL CARE

The principal objectives in giving perineal care are: cleanliness, to insure safety for the patient; comfort of the patient; and social acceptability.

In teaching perineal care technic the importance of thorough hand-washing, with free lathering of soap and rinsing under running water, should be stressed repeatedly for the patient and her attendant.

Encouragement should be given to change perineal pads as needed. The technic of removing soiled pads from front to back, and of removing

clean pads from the box by catching hold of the tab, being careful not to touch the area to be placed next to the patient, should be carefully explained and demonstrated. The value of a comfortable belt to secure the pad, not too tightly, should be emphasized.

For six to eight days following delivery, patients with sutures should have special perineal care once daily by a nurse, or a well trained attendant, who has ably demonstrated her ability to give such care.

Observations regarding the type and amount of lochia; the height of the fundus; odor, if present; condition of the sutures, if any; and the procedure for perineal care that was taught should be carefully written on the patient's record.

A bed pan and cover, which may be of newspaper, a drape sheet, a box of perineal pads, and a large newspaper or brown paper bag are equipment that will be needed for giving any one of the three methods of perineal care described here.

Method 1. Soap and water cleansing, suggested for patients with no sutures

#### Additional Equipment

Basin of warm water (bath basin may be used)

Cake of mild soap and dish

Wash cloth and towel

#### Procedure

The patient is placed on the bed pan; the safety pins are removed, while the pad is held. The soiled pad is placed in a paper bag container. The patient is draped. The attendant's hands are washed thoroughly, but

not dried.

The wash cloth and soap are used to cleanse the labia and perineum, making sure the strokes are directed away from the vaginal orifice, and that no water enters it. The towel is used to dry the patient thoroughly. A clean pad is applied. The bedpan is removed and covered. The patient is turned on her side. The buttocks are washed and dried. The anal region is cleansed last. The belt is adjusted and the pad is pinned comfortably. The wash basin is emptied before the hands are washed.

The family should be instructed to wash the basin, and to boil the wash cloth and towel in it. Instruction in this method of perineal care should be given the patient and her attendant. They should be instructed to change her pad at least three times a day.

#### Method 2. Boiled cotton cleansing for patients with sutures

##### Additional Equipment

Basin of warm water

8 large cotton pledgets

##### Procedure

Cotton pledgets are boiled in a basin for five minutes and then cooled. The patient is prepared as in Method One. After the patient voids, the height of fundus is measured. The hands are washed thoroughly but not dried. Using one cotton pledget and one downward stroke for each, the labia majora, the labia minora, and the perineum are cleansed. Care should be taken to avoid the vaginal orifice. The soiled pledgets are dropped in the paper bag. A cotton pledget is squeezed as dry as possible and used to remove excess moisture. The pad is applied. The bedpan is removed and covered. The patient is turned on her side and

the buttocks are cleansed; lastly the anal region is cleansed. The area is dried with a pledget squeezed dry. The patient's belt is adjusted and the pad is pinned. The attendant's hands are again washed.

Method 3. Pitcher douche, used only upon the doctor's order

Additional Equipment

Quart jar, milk bottle, or pitcher of solution, as ordered by the physician

Clean absorbent cotton

Paper napkin

Procedure

The patient is placed on the bedpan. Her soiled pad is removed and placed in the paper bag. The patient is draped. The attendant's hands are washed thoroughly. Several cotton balls are arranged on a paper napkin. The solution, prepared according to the doctor's orders, is tested on the inner arm to be sure that it is body temperature. The solution is poured over the vulva, perineum, and inner thighs. The patient is dried with clean, dry, cotton. Used pledgets are dropped in the paper bag. The pad is applied, and the bed pan is removed and covered. The patient is turned and the buttocks are dried.

Note: In view of the present day practice of early ambulation in hospital and home, the use of shower bathing has become widespread. It is a practical and scientifically correct procedure for perineal care, wherever facilities are available, and the patient's condition permits. Care should be taken to instruct the patient in the principles of proper handwashing, the way to apply and remove her pad, and the importance of changing her pad frequently enough for comfort and social acceptability.

## SPECIMEN COLLECTION

Before beginning to collect a specimen the proper equipment should be ready and in place. Every effort should be made to obtain a satisfactory specimen in each instance, for a poorly collected specimen is a waste of time and money.

All specimens should be carefully labeled, identified by filling in the proper blank form with the name, address, and other pertinent information. Care should be observed that the type of specimen and the examination desired are designated. Specimens should be packed carefully in containers which have been secured from the State Health Department Laboratory, and shipped to the laboratory as soon after collection as possible. Cooperation with the laboratory will avoid confusion and unnecessary delays.

### Blood

In drawing blood for serological examinations and for culture, it is necessary to have a good needle attached to a dry, sterile syringe. The surface over the median cephalic vein should be cleansed with a cotton ball moistened with alcohol. The tourniquet should be adjusted, the vein mobilized and entered from the side. Five to ten cc. of blood should be withdrawn. The tourniquet should be released before the needle is withdrawn, to avoid excessive hemostasis. The needle should be removed from the syringe before transferring blood from the syringe to a sterile test tube. The blood should be kept in the ice box until time to mail it. It should not stand at room temperature longer than one-half to one hour after collection.

Blood may be submitted for serological test for syphilis, agglutination tests for febrile diseases, such as, tularemia, typhoid, undulant, and typhus fever.

Causes for hemolysis include:

Bacterial contamination from a dirty syringe or tube

Water or alcohol in the syringe or tube

Forcing blood rapidly through the needle

Touching the cork or allowing it to fall on the table

Heat.

### Spinal Fluid

In obtaining spinal fluid for examination it is necessary to have special needles for lumbar punctures. The patient should be placed in the position preferred by the doctor, draped with sterile towels, and the area between the third and fifth lumbar vertebrae cleansed. The first few drops of fluid should be discarded, then the test tube should be held under the end of the dripping needle and five to ten cc. of fluid collected. The stopper should be placed in the test tube. The puncture wound should be covered with a sterile dressing. The fluid should be transferred to the laboratory. The cell count must be done immediately after collecting the specimen. Important points to remember in connection with a lumbar puncture are to use a special needle for facilitating closure of punctures, to gradually remove the stylet in order to permit slow drip of fluid, and to limit the amount of fluid withdrawn to a maximum of ten cc.

## Smears

Gonorrhoea. Both cervical and urethral smears should be submitted. Before collecting material for the smear, all gross exudate or old material should be cleaned from the mucous membrane with a dry cotton swab. (The speculum should be moist, but no lubricant should be used.) The mucous membrane should be touched with a clean swab in a rolling like motion and a thin film of exudate should be transferred to one end of the slide, with a rolling instead of a smearing motion of the swab. It should be dried in a dust-free place away from insects. Smears should be placed with surfaces apart, and packed carefully to avoid breakage.

Vincent's (Trench Mouth). The specimen should not be taken from a bloody area, if possible. An applicator stick that is broken to the size of a toothpick should be used to enter between the teeth, in order to obtain organisms which fail to grow on outer surfaces. A clean slide should be smeared and allowed to dry.

Darkfield Examination. In collecting specimens for darkfield examination, the surface of the lesion should be lightly scraped with a scalpel, rubbed free of exudate and blood with gauze, and a cover glass should be touched to the drop of almost clear serum pressed from the lesion. The cover should be placed on the slide and gently pressed down to form a thin film. This material must be examined immediately under a microscope.

Malaria. Thick blood smears are made for malaria and relapsing fever examinations. The site of puncture, either the finger tip or the ear lobe should be cleansed with alcohol, punctured, and the first drop

of blood should be cleaned away with a piece of dry cotton. The second drop should be collected on a clean glass slide and with the corner of another slide the blood should be whipped with a rotary motion for about twenty rotations making a film about the size of a dime. If the blood has been drawn from a vein, a smear may be made with a drop of this.

### Cultures

Diphtheria. A good light on the area involved is necessary. The tongue should be depressed, the membrane should be touched with a sterile swab, the tonsils should be circled, and the area lodged in the throat touched. The swab should be removed without touching the tongue or the sides of the cheeks. One slant of Loeffler's Media should be inoculated from the throat and one from the nose. In both instances the swab should be rotated lightly over the surface of the media, the applicator stick broken off and the swab-end dropped into the tube.

Gonorrhoea. The same procedure should be used in collecting material for cultures as for smears. A reasonable amount of exudate should be obtained on a swab, and the agar plate which is obtained from the laboratory should be streaked with light rolling strokes. The plate should be covered securely and sent to the laboratory immediately.

### Feces

Typhoid or Bacillary Dysentery. Feces for typhoid are collected the second week of the disease, for bacillary dysentery as soon after the onset as possible. When the stool is formed, about two grams

occurrences, is apt to forget that to the child, and to many adults as well, they are fearsome and unpleasant experiences.

It is important to prepare the child for the needle prick. It is wrong to tell him: "Now this won't hurt; don't cry," because it does hurt, and in deceiving him we begin to build up in him a distrust of all physicians and nurses, who will be concerned with his health supervision. It is, moreover, his right, and a good emotional outlet, for him to cry in response to pain, if he so desires. The fact that crying is unpleasant to the ears of adults deserves no consideration whatsoever.

It is also a bad practice to distract a child and to "stick" him when his back is turned. It is more desirable to take the positive approach. If the child is old enough, he should be told a little about the disease against which he is being protected. Then he might be told something like this: "Now, this will hurt for a while, but I am doing it to help you keep well," or "This will feel like a mosquito bite," (most children know what a mosquito bite is), "but it will all be over in a minute."

It is best to immunize the child in a room where other children, who are waiting for their own injections, will not see him, as they become apprehensive if they watch the procedure. Sometimes placing a piece of adhesive over a needle puncture, or remarking about a hair ribbon or a fancy belt will afford compensation to the child for the pain inflicted.

### Smallpox Vaccination

The skin should be cleansed with acetone or ether. The use of alcohol is permissible only if one allows the site to dry thoroughly before placing the vaccine on the skin. The conventional site is the skin overlying the insertion of the deltoid muscle. A drop of vaccine should be placed on the skin. Multiple oblique pricks, 30 or more, should be made into the skin through the vaccine, with the needle held nearly parallel to the surface of the arm.

CAUTION. An occlusive dressing or shield should never be put over the vaccinated area. A very loose gauze dressing may be used to help prevent scratching if needed. One should be careful when vaccinating children with chronic skin diseases. In general, unless there is an epidemic, it is better to defer vaccination on children who have eczema, insect bites, or other skin lesions until such time as the skin is clear. Blood should never be drawn when vaccinating. Only the epidermis should be gone through.

A primary vaccination or take, gradually passes through the stages of maculation, papulation, vesiculation, and pustulation, and reaches its height usually in 8-12 days, or by the 21st day.

A vaccinoid reaction or accelerated take quickly passes through the stages noted above, but the reactions subside more quickly. Often it does not reach the stage of pustulation, and desiccation may be complete within three to seven days.

A reaction of immunity indicates an individual successfully vaccinated previously or an individual who has suffered from an attack of smallpox. It indicates that at the time of vaccination the individual

has sufficient protective antibodies against smallpox. This reaction may consist merely of a slight erythema, a small papular elevation, or a few vesicles, and usually follows vaccination within 24 hours. Therefore, the site of any vaccination should be inspected within one to three days after a primary vaccination.

THE FACT THAT THERE IS NO "TAKE" DOES NOT SIGNIFY THAT THE INDIVIDUAL IS IMMUNE. IF THE VACCINE IS POTENT AND THE VACCINATION IS PROPERLY DONE, ONE OF THE THREE ABOVE DESCRIBED REACTIONS SHOULD ALWAYS OCCUR.

Prevention of "alum" abscess. The following technic is suggested to avoid possible abscess formation, particularly when using alum precipitated preparations. The site of the upper arm, lateral and distal to the deltoid muscle should be cleansed. The syringe needle should be wiped dry or a separate dry needle used for the injection. With the dry needle pointed distally, the skin should be pierced parallel to the humerus, and the subcutaneous tissues entered. The plunger should be pressed slowly, and the dose injected deeply subcutaneous. The needle should be allowed to remain in place a few seconds before it is quickly withdrawn. A gauze pad should be placed over the puncture site. Gentle, firm stroking, distally, along the course of the needle is recommended. This technic is most important for alum precipitated preparations and is probably the technic of choice for all injections given subcutaneously in the arm.

#### Schick Test

One skin test does, that is, 0.1cc of diphtheria toxin, should

be injected, intradermally into the flexor surface of the forearm. THE INJECTION SHOULD BE MADE INTO THE SKIN, NOT UNDER IT. For practical purposes it is not necessary to test young children before immunization. The test should be read four to five days after performance to avoid erroneous impressions obtained from false positive reactions which appear from 12 to 48 hours after injection and then fade. An area of redness, 0.5 cm. in diameter or more, denotes a positive test and indicates susceptibility. A negative Schick test may very rarely occur in susceptible persons.

#### Tuberculin Testing

One tenth cc. of Old Tuberculin (1:1000) should be injected intradermally into the flexor surface of the forearm. It should be read in 48-72 hours. An area of redness or swelling, 5 mm. or more, around the site of the puncture, denotes a positive reaction.

Illustrations of various types of injection may be found on the following pages.

#### Care of Syringes and Needles

Immediately after using, each syringe should be separated and rinsed in cold water and the needles should be flushed with cold water. If it is impossible to rinse the syringe immediately after use, the parts should be separated.

The separated parts should be washed thoroughly with warm water and liquid soap, and the barrel and plunger scrubbed with a good grade fiber brush, special attention being given to the inside of the barrel of the syringe. The parts should be rinsed thoroughly to remove all

traces of soap. Three changes of water and a clean brush should be used. The first water rinse is to make sure all soap particles are removed from the scale and graduation marks. For blood work, distilled water should be used for the last rinse. The parts that are rinsed in alcohol or ether, should be allowed to dry thoroughly. If they are sterilized immediately, it is not necessary to dry them.

The most efficient method of separating stuck syringes is to use an instrument called a "syringe opener," following the directions supplied with the apparatus. When one does not have such an apparatus, other methods may be used, such as, boiling the syringe in a 25 per cent aqueous solution of glycerine and removing the plunger while hot; or placing the syringe in ice water a few minutes and then immersing up to the flange in hot water for a few seconds, so that one may remove the contracted plunger from the barrel.

To remove stuck or jammed needles, the square part of the needle hub should be grasped firmly in a pair of pliers or forceps. The forceps or pliers should be held firmly and the syringe slowly rotated counter-clockwise, with the free hand. Care must be taken not to pry in any direction.

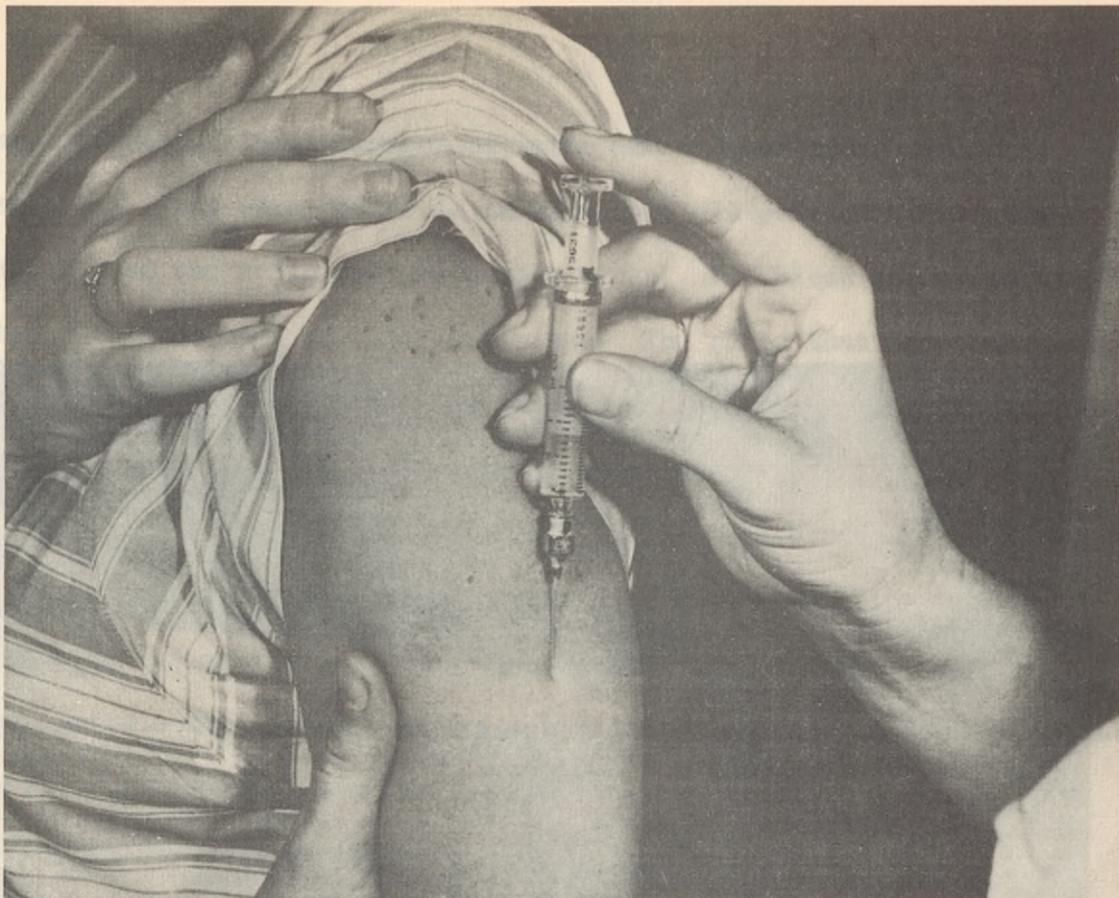
Autoclaving is generally accepted as the best practical method of sterilizing syringes and needles. Boiling seems to be the method most generally used.

Autoclaving. After thoroughly cleaning, washing, and rinsing syringes, the parts of the syringes should be matched as to serial numbers. They should be wrapped separately in gauze and then wrapped together in a double layer of muslin or paper, correctly labeled. The



Intradermal Injection

83A



Distal Subcutaneous Injection



Smallpox Vaccination - Multiple Pressure Method

needles should be put in gauze packs. They should be sterilized at 15-20 pounds of pressure at 240° F. for 20 minutes.

Boiling Only distilled water should be used to avoid scaling. The syringes and needles should be boiled vigorously 10 to 20 minutes in sufficient water to cover them completely. They should be removed from the boiling water with sterile forceps and laid in a sterile towel.

The use of needles and syringes in the field (school, etc.) may necessitate altering the above suggestions to meet the particular situation. It is suggested that for mass immunizations, five to ten cc. syringes be wrapped in heavy brown paper and autoclaved beforehand, and that a generous supply of needles be provided with facilities for sterilization by boiling. With the exception of the skin test materials, no single immunization comes in a dose smaller than 0.5 cc. for the various products. Properly graduate five to ten cc. syringes should be used for mass immunizations, with the needles being changed after each injection.

Syringes used for tuberculin testing should not be used for other materials, since it is difficult to remove the tuberculoprotein completely from the syringe.

#### ISOLATION TECHNIC

Where the nursing care of a person with a communicable disease is concerned the following isolation procedures in the home or hospital are recommended. Certain parts of these technics may also be used in a school situation, if a child is suspected of having a communicable

disease.

In making a communicable disease visit, the public health nurse should set up the nursing bag in a room other than the one occupied by the patient. Her coat, hat, record case, etc., should be left outside of the patient's room on a chair covered with newspapers. Paper aprons should be worn by the nurse for all communicable disease visits.

If the family has a thermometer, the nurse should use it to take the patient's temperature. When the thermometer from the nursing bag is used, a paper napkin, a soap and an alcohol pledget, to clean the thermometer, should be taken into the patient's room, to avoid bringing the containers, themselves into the room. The nurse should plan for all the services she will render to the patient so everything needed may be assembled before beginning the care.

After the patient's temperature has been taken, the thermometer should be cleaned with the soap and the alcohol pledget, and placed on the paper napkin. After she has completed her nursing services in the sick room, the nurse should remove her paper apron, being careful not to contaminate her uniform with her hands. She should fold the apron in a small bundle and deposit it in the waste container in the patient's room. This waste is burned later. After she has washed her hands, she should pick up the paper napkin by one corner and also deposit it in the waste container. She should carry the thermometer back to the bag set-up, proceeding with the usual thermometer technic (page 66). It is usually not necessary to take the patient's record into the sick room, but when anything of this nature is needed in the isolation unit it should be protected by a newspaper square or paper

napkin placed underneath it. (Figure 2).

Selection of room. A separate room for the patient is always advisable. In situations where there are two or more patients with the same communicable disease, separate beds are necessary to avoid secondary infections. The room selected should be well ventilated. It should be removed from the center of family activity, and adjoining a bathroom, if possible. Having a door that opens directly to the outside is desirable.

Where it is not possible to have a separate room an area may be chalked off to indicate the barrier beyond which family members should not go. This affords a measure of protection where one is dealing with an infectious condition which is not highly contagious. This same procedure may be used to afford some protection for the well infant where several family members have an infectious or communicable condition. In this case the chalk line indicates the clean area.

It is suggested that all unnecessary furnishings, especially rugs, knick-knacks, and curtains, be removed from the room if they have not already been contaminated. Articles to be used by other members of the family should be removed and properly cleaned. All articles used by the patient are considered contaminated. They should not be carried to clean areas in the home. Except for the attendant, all persons, including those who have had the disease in question, should be advised to remain away from the patient's room, for the protection of all concerned.

Instructions to attendant. The attendant should collect and place in the room all the necessary articles for patient care, such as soap,

kleenex, toilet tissues, paper napkins, alcohol, wash basin, bed pan, newspapers, disinfectant solution, bed and personal linens, etc. These, as well as the patient's soiled articles, should remain in the room until terminal cleaning has been done. The attendant should wash her hands with plenty of soap and water, paying close attention to the finger nails, before she puts a cover-all apron or smock over her dress. This garment should be worn whenever care is given to the patient. It is hung with the outside out near the entrance of the patient's room, and it should be replaced daily, or oftener, as necessary. The value of wearing a cap or kerchief to cover her hair while caring for the patient should be discussed with the attendant. She should be cautioned not to touch her face with her hands while in the patient's room.

When nursing care is completed and the room has been put in order, the attendant should wash her hands before and after removing her apron. If running water is not available in the room, a small table should be placed just inside the door of the room, with a wash basin, soap, large container of water and paper towels. A large pail for waste water and a waste basket for used towels should be kept underneath the table.

Care of soiled linen and clothing. Bed and bath linen and clothing used by the patient are kept in the patient's room in a suitable, covered container until they are laundered. The container should be one that can be sterilized or discarded. Stained linen should be cared for at once. In carrying the used linens from the sick room, the attendant should be cautioned not to touch her dress. (Figure 3).

The linen should be placed directly in a wash boiler, covered with cool water, to which washing soda and soap are added. The linens should

# Diagram of Suggested Isolation Unit

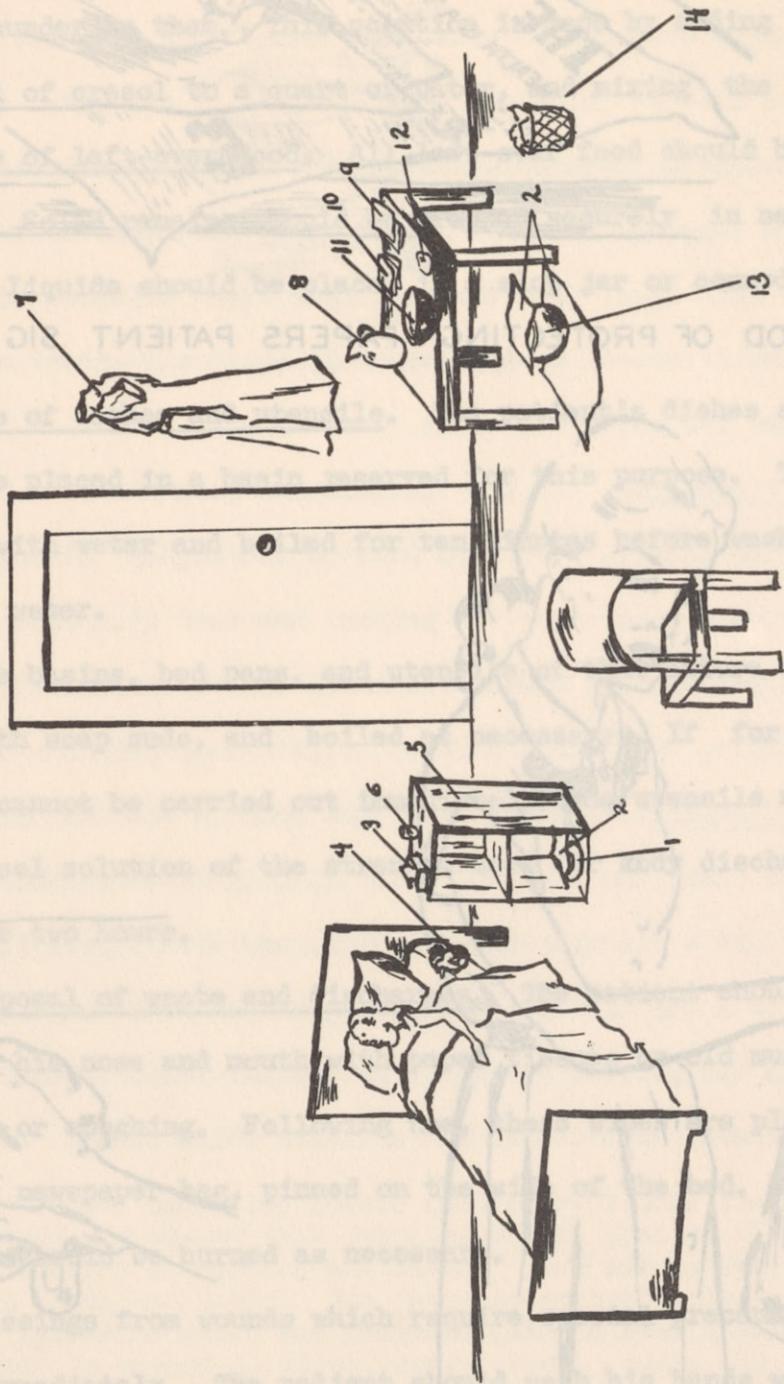


FIG. 1

- |              |                 |                      |                  |                  |
|--------------|-----------------|----------------------|------------------|------------------|
| 1. Bedpan    | 4. Paper bag    | 7. Coverall apron    | 10. Paper Towels | 13. Pail         |
| 2. Newspaper | 5. Orange Grate | 8. Pitcher           | 11. Basin        | 14. Waste Basket |
| 3. Kleenex   | 6. Glass        | 9. Newspaper Squares | 12. Soap         |                  |



FIG. 2 METHOD OF PROTECTING PAPERS PATIENT SIGNS



FIG. 3 METHOD OF CARRYING SOILED LINEN .



FIG.4 METHOD OF PROTECTING WATER FAUCET

be boiled for ten minutes and then laundered in the usual way. Sometimes it is easier to put linens to soak in a solution of cresol for two hours before laundering them. This solution is made by adding four to six teaspoonsful of cresol to a quart of water, and mixing the solution well.

Care of left-over food. All left-over food should be disposed of at once. Solid remains should be wrapped securely in newspaper and burned. Liquids should be placed in a slop jar or commode for disinfection.

Care of dishes and utensils. The patient's dishes and silverware should be placed in a basin reserved for this purpose. They should be covered with water and boiled for ten minutes before washing them with soap and water.

Bath basins, bed pans, and utensils of that nature should be washed daily with soap suds, and boiled as necessary. If for any reason boiling cannot be carried out immediately, the utensils may be placed in a cresol solution of the strength used for body discharges, and left there for two hours.

Disposal of waste and discharges. The patient should be instructed to cover his nose and mouth with paper tissues or old muslin squares when sneezing or coughing. Following use, these wipes are placed in a brown paper or newspaper bag, pinned on the side of the bed. This bag and its contents should be burned as necessary.

Dressings from wounds which require special precautions should be burned immediately. The patient should wash his hands with free lathering of soap and water poured over the hands after touching infectious discharges of any kind.

For typhoid fever, diarrheal diseases, tuberculous enteritis, tuberculosis of the kidney, or diseases of a similar type, bowel and bladder discharges are treated with chlorinated lime or cresol. For the chlorinated lime solution use twelve ounces of chloride of lime to a gallon of water. This solution must be corked tightly as it loses its strength on exposure to air. Fresh stock solutions must be made every three or four days. Add the amount of stock solution of either chlorinated lime or cresol to approximately equal the amount of discharge and let it stand for about two hours.

Bathroom Procedures. If the patient has been allowed bathroom privileges by the doctor, the room must be thoroughly cleaned with soap and water each time after the patient has used it. This includes everything the patient has touched in or on the way to the toilet, such as flushing handle, bath tub, faucets, toilet seat, and door handles.

Terminal Cleaning. Fumigation of the room is not necessary. It is important to clean the room and everything in it thoroughly, with soap and water and a disinfectant solution, and then expose them to air and sunshine for a day or two. Everything in the room that has come in contact with the patient and is of no special value should be burned. Pillows, bed covers, mattresses, and articles which cannot be boiled may be sponged off with five percent cresol solutions before exposure to the direct rays of the sun. Before the patient is released from isolation he should have a bath, shampoo, and clean clothing.

## OIL CAN TECHNIC

### (A Method of Formula Making)

#### Equipment

Bottles, one for each feeding with at least one having ounces

marked for measuring purposes

Nipples, one for each bottle

Pitcher or bowl for mixing ingredients

Spoon

Funnel

Can opener

Bottle brush

5-quart oil can with bail made of a coat hanger

Plate to cover oil can

Platform made of the top of an oil can

String or rubber bands

Large squares of brown paper or paper caps

1 mayonnaise jar for collecting soiled nipples

Formula ingredients

#### Procedure

The hands are washed with soap and water, special attention being paid to the hands and nails. The dress is covered with a clean apron. All equipment is washed in clean, soapy water, using the bottle brush for the bottles. The nipples are turned and scrubbed well. The oil can must be thoroughly cleansed with soap and boiling water and all

traces of oil must be removed. All equipment is rinsed thoroughly.

Referring to the physician's written formula:

The exact amount of unboiled water and the exact amount of milk are measured and poured into the pitcher or bowl. The exact amount of sweetening is measured, added to the water and milk and mixed well with a spoon. The amount of formula that the infant usually takes for a feeding is poured into each bottle. An extra bottle of formula may be prepared, or from one-half to one ounce of milk may be added to the amount in each bottle to meet an unexpected demand of the infant, as the physician recommends.

Each bottle is covered with a nipple. Each nipple is covered well down over the bottle neck with a large square of brown paper or a paper cap. The paper is fastened on the bottle with a string or rubber band.

The platform is placed in the bottom of the oil can, and the bottles of formula are put on the platform. The oil can is filled with tap water to the level of the milk in the bottles, however three inches of water is sufficient for thorough sterilization. The can is covered with a plate or lid and put on the fire to heat. When the water starts to boil, it is boiled thirty minutes by the clock. The oil can and its contents are taken off the stove. The can is kept covered and set aside in a convenient place.

When the baby is ready for a feeding, one bottle is taken out of the oil can and the formula is warmed as indicated. The paper cap or brown paper is removed, and the baby is fed. After the baby has taken all he wants, the left-over formula is discarded. The bottle is rinsed and set aside. The nipple is rinsed and put in the jar for used nipples.

## INTERVIEWING

Interviewing may be defined as the art or act of intellectual perception or examination between or among two individuals.

There are all types of interviews. They include personal, interpretative, educational, professional, and therepeutic interviews. The technics for educational, professional, and therapeutic interviewing are considered the most important to professional workers. Therefore, these types will be considered primarily in this outline.

There are no set rules that may be followed in interviewing; but there are certain psychological aspects and basic principles that may be used as a guide for the interview.

The technic of interviewing can be improved through practice. But practice alone is not enough. In addition, the interviewer must have:

- A knowledge of interviewing
- A self-conscious study of practice
- A scientific knowledge of the subject discussed
- A sensitive understanding of human behavior
- An ability to listen and anticipate problems
- A warmth of interest in people
- A sincere desire to be helpful
- A respect for other people's feelings.

Whether in the clinic, home, or office, an interview begins with its purpose clearly defined. Some of the purposes of educational, professional, or interpretative interviews are:

- To give and to seek information concerning the person's health

or illness.

To aid the individual in making mental and social adjustments  
To assist the individual to recognize and acknowledge personal problems

To motivate the individual to practice health principles

To aid in case finding

To interpret the physician's findings, and to supplement his instructions.

The technics of interviewing cannot be reduced to a formula, for individual traits vary. There are characteristic modes of human action and reaction. An awareness of this increases the chances for satisfactory relationships with others.

The interviewer should keep these points in mind:

The facial expression can make or break an interview

The voice should not be over-anxious, not too sympathetic, nor too demanding

The posture should not be too severe, nor too casual

Gestures, such as a wave of the hand or a shrug of the shoulder can give the wrong impression.

In seeking to help people even in very simple situations, we need to listen to the undertones which reveal their feelings.

It is essential for an interviewer to refrain from imposing his own moral judgments upon the interviewee. The nurse and interviewee have lived under different environmental circumstances which have influenced their attitudes as to the interpretation of right or wrong. The tendency to impute one's own feelings to others is natural, but this can result in misunder-

standing the interviewee's situation and problems.

Individuals manifest conflicting pulls when they obviously want help, but, either from pride or lack of information are hesitant to ask for it. Too, a person may say one thing, but by his behavior indicate the opposite.

An understanding of other conditions involved is also important. For instance, the basic needs as related to living -- security, desire for new experience, recognition, and love and response -- are factors that influence everyone's behavior patterns.

When warm human interest and understanding vanish from interviewing it becomes a monotonous, mechanical thing that is relatively valueless. Successful interviewing necessitates more than a casual knowledge of the important role of human motives. This knowledge should be applied to an understanding not only of the person's personality, emotions, prejudices, and needs, but to the interviewer's own behavior. The old Greek adage, "Know Thyself," is especially applicable to interviewers.

Understanding, interest, and skill are requisites for successful interviewing, but there are more concrete basic principles which should be considered in conducting an interview. They are:

1. Privacy should be provided to establish better rapport.
2. All of the data available from the individual's medical record should be obtained before starting an interview.
3. The interview should begin by the nurse introducing herself, and a statement of the reason for the interview should follow.
4. Confidence should be established by convincing the interviewee the nurse's sole interest is the welfare of himself,

his family or friends.

5. The individual should be allowed to tell his own story in his own way.
6. Brief comments should be made or a few questions asked by the nurse to indicate that the essential points of his story have been grasped.
7. The discussion should then be started at the interviewee's point of interest.
8. The problem should be approached in a way that gives the individual a feeling of self respect. It should be emphasized that good health helps to maintain high standards of efficiency, and leads to the betterment for the whole of society.
9. At certain points the nurse may need to motivate the interviewee by indirect questioning.
10. The first interview should go only as far as the interviewee can go.
11. Visual aids should be used to supplement the subject discussed.
12. At the conclusion of the interview the individual should be given written instructions regarding pertinent points which have been discussed.

Content of the interview will depend on the interviewee's particular needs and abilities.

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## SERVICES

### COMMUNICABLE DISEASES

Communicable disease control as part of a generalized public health nursing program places special emphasis on the protection of the individual and the community against communicable diseases.

#### Objectives

1. To assist in conserving and maintaining maximum health for every individual by preventing the spread of communicable diseases
2. To assist in returning to health every person with a communicable disease, and in reducing mortality, disability, and illness caused by the various infective agents.

#### Functions

1. To know and be able to interpret state and local laws regarding communicable disease control
2. To plan the nursing program based on:
  - Community needs, (morbidity and mortality statistics\* are among the useful tools in determining needs) environmental public health hazards, community resources and hospital facilities.

\* Weekly morbidity reports are compiled by the Texas State Department of Health and sent to local health departments and county and city health officers.

3. To promote more complete reporting of all reportable diseases
4. To participate in making epidemiological investigations
5. To teach the patient and family how to follow medical instructions, and isolation measures, through demonstrations and other means
6. To instruct parents, teachers, and other individuals and groups regarding:

Importance of adequate medical and nursing care

Recognition of early symptoms

Approved methods of carrying out precautions to prevent the spread of infection, including the isolation of suspicious cases, concurrent and terminal disinfection measures, etc.

Value of adequate convalescent care.

7. To assist, under medical direction, in securing the necessary immunizations for all infant, preschool, and other age groups.

### Management of Service

Case finding. The nurse may assist with case finding by obtaining referrals from health officers, private physicians, school personnel, other agencies or individuals; by investigating possible sources of known infection, including carriers; and by visits made for other types of nursing service.

Case selection. New cases of epidemic meningitis, scarlet fever, smallpox, diphtheria, typhoid fever, poliomyelitis, tuberculosis, primary and secondary syphilis should be given first consideration and the other communicable diseases, such as measles and chicken pox, visited as time permits.

Case load. The case load will vary with the promptness and completeness of communicable disease reporting in the area, according to the unit policies concerning communicable disease control; with the level of community appreciation and participation in the program; with the number of personnel giving service; and with the seasonal outbreaks of the various communicable diseases.

Frequency of visits. For those cases where isolation or quarantine is indicated as a control measure, a minimum of three home visits should be made. The first visit is for the purpose of demonstrating the isolation set-up, and the care of the patient. The second visit is to determine the family's ability to carry out the isolation procedures and to give nursing care. The third visit is for the purpose of teaching all the factors involved in the release of the patient from isolation or quarantine. At this time consideration is given to the plan for convalescent care and follow-up studies on the patient and his contacts.

Order of visits. In rural communities, where the nurse travels a considerable distance between homes and spends some time in the open air, she may visit acute communicable disease cases in logical sequence if approved nursing technic is carried out. It is imperative that good technic be observed in making all communicable disease calls. In a city or densely populated area, where there is little or no time between visits, it is preferable for the nurse to make communicable disease visits at the end of the day. She should arrange her visits so that she does not go directly from a communicable disease visit to a non-infected household where maternity or pediatric service is to be given. This is especially true when she is carrying cases of streptococcal infections.

Termination of service. Service is terminated when there is no longer any danger of the spread of the causative organism. Local policies which have been set-up by the unit director and other recognized authorities in the community determine to a large extent the isolation, quarantine, and follow-up periods on cases and contacts in a situation.

### Home Visiting

Strict isolation and quarantine are required for some diseases. All instructions regarding the removal of contacts from the home, wage earner's permit, sale of milk and milk products, care of laundry, and other specific directions, such as the care of library books in the home, should be included in the Unit Manual of Procedure, or discussed with the local health officer before specific directions are given. Isolation technic and specimen collection are discussed in the section on technics.

Placarding of the home for such diseases as poliomyelitis, diphtheria, epidemic meningitis, smallpox, scarlet fever, and typhoid fever will depend upon local regulations, and the directions given by the health officer.

Teaching aids. Demonstrations of approved isolation technics may be valuable teaching aids. Leaving written instructions with the attendant and family following the demonstrations is often helpful. Visual aids, such as, films, charts, posters, models, etc., may be used to good advantage when teaching various groups isolation technic procedures, and communicable disease control measures. In her book, Improvised Equipment

in the Home Care of the Sick, Lyla Olson suggests many ways of using substitute equipment to make the patient comfortable.

### Recording

Complete recording on the Communicable Disease Record, C-6211, is most important. It should serve as a valuable tool for epidemiological studies, and as a guide for planning service to the patient. Manual of Records and Procedures, Section II, III, IV.

### Immunization Clinics

The basic principles of clinic management and procedures as explained in the section on clinics, and in Section II of the Manual of Records and Procedures may be applied to immunization clinics. A discussion of immunization and testing procedures may be found in the section on technics.

It is recommended by the Texas State Department of Health that an authorized, licensed physician should be present when immunizing agents are given. It is preferable that the physician himself administer the immunizing agents, but in large clinics it is realized that it may be necessary for nurses to carry out these procedures, under the personal direction of the physician.

The importance of passing on to the public reliable information concerning immunizations and tests cannot be overemphasized. The person giving such immunizations and tests should feel a responsibility not only for having reliable information, but also for imparting to the persons concerned such information as they are capable of understanding. These facts must be repeated many times, because of the change in the

patient load, and because persons with no medical background will need this repetition. In regard to immunizations the individual being immunized, or, in the case of an infant or preschool child, the parents should be told:

The disease against which immunization is being given

The local and systemic reactions to be expected from the injection

The approximate duration of protection

When and if a booster dose will be needed.

Period of Exclusion from School

The Communicable Disease Rules and Regulations adopted by the Texas State Board of Health, November, 1946 are as follows:

DISEASE	PERIOD FROM EXPOSURE TO DEVELOPMENT	PERIOD OF EXCLUSION OF CASE FROM SCHOOL	REQUIREMENTS FOR READMISSION
Chickenpox	14-21 days	7 days after onset plus whatever time Health Officer deems necessary	Certificate from health officer or attending physician
Colds	12-48 hrs.	During acute stage. Time to be set by local health authority	At discretion of local health authority or when symptom free
Diphtheria	2-5 days	Until 2 consecutive negative cultures are obtained or 14 days where laboratory is not available.	Certificate from health officer or attending physician
German Measles	10-21 days	Until symptoms are gone. Time to be set by local health authority.	At discretion of local health authority

Measles	10-21 days	7 days after appearance of rash plus whatever time Health Officer deems necessary	Certificate from health officer
Meningitis (Epidemic)	2-10 days	7 days after onset plus whatever time Health Officer deems necessary	Certificate from health officer or attending physician
Mumps	12-26 days	7 days after onset plus whatever time Health Officer deems necessary	Certificate from health officer or attending physician
Poliomyelitis	3-14 days	7 days after onset plus whatever time Health Officer deems necessary	Certificate from health officer or attending physician
Scarlet Fever	2-5 days	7 days after onset plus whatever time Health Officer deems necessary	Certificate from health officer or attending physician
Smallpox	7-21 days	Until released by Health Officer or attending physician	Certificate from health officer or attending physician
Typhoid Fever	7-14 days	Until 2 successive negative stool or urine specimens are obtained or at least 21 days where laboratory facilities are not available	Certificate from health officer or attending physician
Whooping Cough	7-10 days	7 days after onset plus whatever time Health Officer deems necessary	Certificate from health officer or attending physician
Skin Disease		Until free of symptoms	Certificate from health officer or attending physician
Pediculosis		Until lice and eggs are removed	Certificate from health officer or attending physician

Pink Eye	2-7 days	Until symptoms are gone	Certificate from health officer or attending physician
Trachoma		7 days after onset plus whatever time Health Officer deems necessary	Certificate from health officer or attending physician
Vincent's Angina (Trench Mouth)		Until released by physician or dentist	Certificate from health officer, attending physician or dentist

For a summary of general information regarding the various communicable disease, see "The Control of Communicable Diseases," published by The American Public Health Association, 1945.

#### References

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Minnesota Department of Health. Manuals for Public Health Nurses, 1941-1942 and 1947-1948. Minneapolis, Minn.

National Organization for Public Health Nursing. Manual of Public Health Nursing. 3rd ed. New York, N.Y., The Macmillan Co., 1944

Olson, Lyla M. Improvised Equipment in the Home Care of the Sick. 4th ed. Philadelphia, Pa., W. B. Saunders Co., 1947

Texas State Department of Health. Manual of Records and Procedures. 1st ed. rev. Austin, Texas, 1948.

#### Suggested Reading

Texas State Department of Health Publications:

Daily Observation for Communicable Diseases, No. 8648

Immunization Procedures and Care of Biologicals, No. 8682

Immunizations, No. 8649



## TUBERCULOSIS

Tuberculosis nursing in communicable disease services is a part of family and community health supervision for the prevention and control of tuberculosis, and the care of tuberculous patients.

### Objectives

1. To assist in conserving, protecting, and promoting the health of every individual by the prevention and control of tuberculosis
2. To restore to health persons infected with tuberculosis
3. To create an awareness of the tuberculosis problem, and the method of its control through education of the individual, the family, and the community.

### Functions

1. To assist in case finding and contact tracing, and in securing medical examination and supervision
2. To assist in making epidemiological investigations and in securing reporting of all cases
3. To instruct the patient and the family in the importance of a healthful regimen and the precautions to be taken in preventing the spread of infection
4. To give or arrange for necessary nursing care through demonstration and supervision of care given by relatives or attendants
5. To aid the patient and family in arranging for sanatorium and post sanatorium care, including rehabilitation
6. To promote better understanding of the nature and control of

tuberculosis through clinic services, home visits, and individual and group conferences

7. To contribute to the integration of services of clinics, sanatoria, private physicians, health departments, and other related health and social agencies.

### General Information

Classification of cases as to stage and status. Special terms used to indicate the stages of pulmonary tuberculosis are minimal, moderately advanced, and far advanced. The following definitions are taken from "Diagnostic Standards," published by the National Tuberculosis Association.

"Minimal - Slight lesions without demonstrable excavation confined to a small part of one or both lungs. The total extent of the lesions, regardless of distribution, shall not exceed the equivalent of the volume of the lung which lies above the second chondrosternal junction and the spine of the fourth or the body of the fifth thoracic vertebra on one side.

"Moderately Advanced - One or both lungs may be involved, but the total extent of the lesions shall not exceed the following limits:

Slight disseminated lesions which may extend through not more than the volume of one lung, or the equivalent of this in both lungs.

Dense and confluent lesions which may extend through not more than the equivalent of one-third the volume of one lung.

Any graduation within the above limits. Total diameter of cavities, if present, estimated not to exceed four cm.

"Far Advanced - Lesions more extensive than moderately advanced."

Terms used to indicate the clinical activity or status are active, quiescent, apparently arrested, and arrested.

The terms probably active, probably inactive, and questionably active, are also found in reports and indicate a need for further X-ray and clinical follow-up to determine a definite diagnosis.

Primary or first infection tuberculosis is infection only - involving mainly lymph nodes, not tuberculous disease, and so is not referred to by stage, only by the terms healed, healing, or active.

Contact examination. The following is a suggested plan for follow-up of contacts. From birth to 15 years of age tuberculin skin test the contact where there is an active case of tuberculosis in the home. It should be repeated every six months as long as the reaction remains negative. Positive reactors are X-rayed on recommendation of the physician. Children in contact with an active case of tuberculosis, or having a recent conversion to a positive tuberculin test should have health supervision by the family physician or in a child health conference.

For contacts 15 years of age and over an X-ray should be made at least annually, and preferably every six months, or when systemic symptoms appear, or if there is any intercurrent illness.

From birth to 15 years of age where the contact has been permanently broken, tuberculin skin tests are made and repeated every six months for one year if the reaction remains negative. If the tuberculin reaction becomes positive, an X-ray is done on the recommendation of the physician, every six months for one year. All children who have been in contact with tuberculosis should have health supervision by the private physician or in a child health conference.

Contacts 15 years of age and over should be X-rayed every six months for one year or when there are systemic symptoms, or intercurrent illness. In probably 95% of the families where the contact is broken, it will be by death. Sanatorium patients who visit home on leave should be treated as active cases.

Sputum examination. It is essential that a sputum status be established on all reinfection tuberculosis cases recognized for the first time. If at the time the case is recognized the patient has a productive cough, the collection of sputum is relatively easy. In cases where the sputum is scanty it is more difficult to collect a satisfactory specimen, and often gastric washings are necessary to establish the status.

For a number of reasons sputum examinations are not consistent and the necessity for repeated examinations should be understood. The usual procedure is the collection of a series of specimens. The time element between obtaining the specimens will vary according to the physician and the laboratory facilities available.

For all practical purposes it is suggested that a series of three specimens be collected, one each week for three weeks. If the sputum is scanty the patient may be instructed to collect a twenty-four hour specimen. The laboratory methods include:

Direct smear. The sputum is examined on a slide

Concentration. The sputum is concentrated by centrifuge and examined on a slide

Culture. The sputum is concentrated and then inoculated on culture media. This method requires six weeks

Gastric washings. Liquid from gastric lavage is treated and cultured the same manner as sputum

Animal inoculation. Gastric washings, body fluids, etc., are prepared as for culture and injected into the guinea pig. This method requires six weeks.

The state laboratories routinely run direct smears, concentrates, and cultures on all sputum specimens and in addition cultures are made of gastric washings. Animal inoculations are made of gastric washings, spinal fluids, synovial fluids, and pleural exudates upon the request of the physician and only at the central laboratory in Austin.

Frequency of sputum examinations. An active case, on which a positive sputum report is received, is likely to remain positive unless the X-ray shows considerable improvement, or unless the patient has had pneumothorax.

Re-examination of sputum specimens for cases under medical supervision will be directed by the physician. Sputum examinations are usually made at four to six months intervals on cases receiving pneumothorax refills. For positive sputum cases receiving "home care" and under the supervision of the health department, at least a yearly examination of sputum is suggested as standard procedure.

One series of three negative sputums should not be accepted as final on an active case. The sputum examinations will need to be repeated at intervals of three months until a positive sputum is obtained, or until the case is diagnosed as arrested.

Patients returning from the sanatorium with a negative sputum, which had previously been positive, should have examination repeated within three months.

The method of collecting sputum is discussed in the section on technics.

## Management of Service

Case finding. The nurse's greatest responsibility in case finding is to the family members of known cases and to individuals in homes where there has been a recent death from tuberculous meningitis or from pulmonary tuberculosis. Statistics show that these are the principle sources from which new cases will be found. Contacts to newly reported cases of tuberculosis and to patients with tuberculosis of some duration are also among the most productive sources for case finding.

In a generalized health service the nurse should be constantly on the alert for symptoms of tuberculosis. Age groups of the greatest significance are young adults and old people. Older members of the household may be source cases.

Other sources of case finding include: Maternity patients, unskilled workers, agricultural workers, venereal disease clinic patients, food handlers, and domestic workers, general hospital admissions, and medical and nursing students.

Mass X-ray surveys of industrial, racial, and college groups, of high school students, and of the general population are additional means of case finding.

Sources of reported cases include referrals and reports from private physicians, reports from mass X-ray surveys, Veterans' Administration, and Interstate Reciprocal Notifications. Applications for state sanatorium care, which are kept on file in the county clerk's office, also provide information about diagnosed cases.

Case selection. The following order of emphasis is suggested:

Acutely ill tuberculous meningitis or miliary tuberculosis

patients of any age

Cases recognized for the first time

Positive sputum cases with infants, adolescents, or young adults in the family

Active cases in pregnant women

Cases with complications

Probably active, suspicious cases

Probably inactive, questionably active, or apparently arrested cases.

Frequency of visits. It is recognized that visits, made at short intervals early in the course of the disease, will accomplish more than the same number of visits made after the case has been diagnosed for some time. The number and frequency of the visits should be determined on the basis of the patient's condition, the presence or absence of the tubercle bacilli in the sputum, the presence of infants, adolescents, or young adults in the family, the ability of the family to understand and put into practice isolation and preventive measures and the family's total needs.

Newly reported cases. The initial visit should be made within the first week after the case is reported. The visits should be made at short intervals in the beginning, once every one or two weeks for at least three visits. The intervals may be lengthened as the patient and his family demonstrate ability to carry out control measures.

Patients recently discharged from the hospital. A visit should be made within the first week after discharge from the hospital. The frequency of visits depends on the ability of the patient and his family

to carry out the recommended treatment and isolation measures.

Patients receiving pneumothorax. Within the first week after the patient is discharged from the hospital a home visit should be made. Patients may be receiving pneumothorax in a public clinic or from a private physician. A clinic patient may be interviewed in the clinic or the office. If he is receiving refills from a private physician, and nursing supervision from the health department, home visits should be made at intervals of from three to four months.

Elderly patients with a positive sputum, and those with long term and occasional illness having positive sputum are ones that will need to be followed indefinitely; however, visits may be spaced at longer intervals. A minimum of every six months is acceptable.

Termination of service. Pulmonary tuberculosis by the very nature of its manifestations, chronicity, and tendency to relapse, requires a continuous service. Termination of public health nursing supervision is limited to the following:

When the patient has been declared arrested for a two year period

When all practical plans for rehabilitation have been completed

When the patient moves from the jurisdiction of the health unit

When the patient changes doctors or transfers to a private physician who does not desire nursing supervision from the health department.

#### Home Visiting

Nursing bag and thermometer technics are used for tuberculosis home visits as described in the section on technics. If the patient has his own thermometer and has been instructed in its use, it is acceptable for

him to take his own temperature.

In interviewing and rendering nursing care consideration should be given to the nurse's own safety and protection. The nurse should have a chest X-ray at least once a year, and every three to six months if her contact with cases is close and frequent. It must be kept in mind that tubercle bacilli may be given off in tremendous numbers in droplets of mucus and saliva that are expelled in coughing or sneezing. Infection may result from breathing in these droplets through the air passages, or from handling articles contaminated by the patient's sputum, sputum droplets, or saliva.

The patient should be instructed to cover the nose and mouth properly when coughing or sneezing. Paper napkins, size 8 x 8 inches, are suggested to give adequate protection. In order that the droplets may be received in the paper napkin the hand should be held, cup-shaped, and lined with several thicknesses of paper. Holding the hand over the nose and mouth during the cough affords sufficient surface to receive the droplets expelled by the respiratory tract.

In giving care to an acutely ill patient, who is unable to control his cough or cooperate by using measures to safeguard others, a mask should be worn.

Hand washing is very important after handling any contaminated article.

The nurse's technic is a demonstration of precautionary measures that should be practiced by the patient, the family, and the home attendant.

Nursing supervision of cases according to diagnosis. All active

cases of pulmonary tuberculosis are likely to have some cough and sputum. Isolation and control measures should be set up and maintained. The sputum status should be established. A positive sputum case is likely to remain positive unless the X-ray shows considerable improvement or unless the patient has had pneumothorax. Therefore, frequent sputum examinations are not required on these cases, although a yearly examination is suggested as a standard procedure. One set of negative sputum reports on an active case should not be accepted as final, since the cases may revert to positive sputum. The sputum examination will need to be repeated at intervals of at least every three months.

Cases with the diagnosis of probably active, probably inactive, and questionably active will need further study by X-ray, and a sputum examination, until a clinical status is determined. The frequency of the nursing visits will be guided by medical direction in establishing a diagnosis.

Quiescent is merely a stationary condition and a positive sputum may be found. The condition might remain quiescent for a long period of time.

Individuals with arrested and apparently arrested tuberculosis are sometimes found doing light or moderate work. No isolation is required for them. Patients need as good living and working conditions as possible. If the patient has not been referred for rehabilitation and there is a need, this should be done. These patients are carried for a period of two years before closing them for nursing supervision.

Cases with the diagnosis of active primary tuberculosis include children, adolescents, and adults with the first infection type of

tuberculosis. They are likely to be persons who have had recent close contact with an open case. Primary infections are not considered contagious, and isolation measures are not necessary. Unless the physician advises otherwise, children with primary infection should attend school. It may be necessary to plan for a rest period and for additional foods. It should be explained to school officials that this is not re-infection tuberculosis, and is not a source of infection. Health supervision in child health conferences and good home care are usually the only treatment indicated. A primary infection in an adult requires only the usual, general health supervision if the contact is broken. If the contact is not broken, medical and X-ray supervision is necessary at the same intervals as for other contacts.

When a case of tuberculosis is reported to the health department for nursing supervision, the first responsibility of the nurse is to talk with the patient's physician to learn the stage and clinical status of the disease, the sputum status, the treatment recommended, activities permitted, diet and special nursing care, and the physician's activity as to contact examination.

Content. The nurse will need to have an awareness of total family needs and of the family's adjustment to this illness. She will be interested in observing or learning the family's emotional reaction on being informed that a member has tuberculosis, what care the patient is receiving, the isolation measures that are being used, and what plans have already been made for the patient. The family should have the following information: The cause of the disease, the mode of entry, how the infection is spread, the proper disposal of sputum, how to use tissues

when coughing or sneezing, the desirability of bed rest, the need for proper treatment, and the necessity for contact examination.

First visits take time because it is necessary to win the confidence of the patient and his family. Only the essentials can be taught on the first visit. The amount of teaching will vary according to the family's previous knowledge and experience.

The patient and the family need a knowledge of the cause of tuberculosis and how infection takes place in order to understand why isolation procedures are necessary. They need an awareness of the fact that pulmonary tuberculosis is most commonly acquired by the inhalation of droplets of sputum expelled by the tuberculous patient when he coughs, sneezes, or spits. Kissing is also a direct method of transferring bacilli from the sick to the well person. The pamphlets: "Avenues of Infection in Tuberculosis," "Tuberculosis Facts in Basic English," and "What You Should Know About Tuberculosis," which are published by the National Tuberculosis Association, will help to visualize the information given by the nurse.

The patient should have a separate room if at all possible. He must have a separate bed. Where it is necessary, changes should be suggested and equipment improvised. The furniture should be arranged so the patient does not need to stretch for needed articles.

The safest method of disposing of sputum is by burning. A demonstration of covering the mouth and nose with paper tissue when coughing or sneezing to prevent the spread of bacilli to other persons is valuable to the family. How to handle the paper bag used to collect tissues may also be demonstrated. The National Tuberculosis Association pamphlet,

"How to Kill Tuberculosis Germs," may be used in this connection, and left in the home by the nurse.

If the patient's dishes are kept entirely separate from those of the family and washed separately, they should be washed in hot soapy water and scalded. If the dishes are returned to the family supply, they should be boiled for ten minutes before washing. Uneaten food should be burned, unfinished liquid poured into the toilet, NOT into the kitchen sink. More complete information on care of dishes will be found on page 23 of the pamphlet, "Home Care of Tuberculosis, A Guide for the Family", published by the National Tuberculosis Association.

If all family linen, including the patient's, is boiled for twenty minutes and dried in the sunshine, there is little likelihood of spread of infection from linens. If linens are kept separate for use of the patient, they should be washed thoroughly in hot water, with plenty of soapsuds, rinsed in hot water, and dried in the sunshine.

Blankets may be washed as necessary in warm soapy water, dried in the sun for several hours, or they may be home dry cleaned and sunned.

Badly soiled linens should be put to soak at once in water, to which soap or washing soda has been added. Other linens may be put to soak also, or stored carefully in a bag or clean pillow slip until laundered.

If linens are sent out to be laundered, instructions for preparing the linen for collection should be obtained from the laundry. More complete instructions for the family will be found on page 24 of the pamphlet, "Home Care of Tuberculosis - A Guide for the Family".

No special diet is recommended for tuberculous patients. There is

nothing better than a normal balanced diet, with milk, meat, eggs, fish, fruits and vegetables in adequate quantities. Information should be given with the aim of improving the nutritional status of every member of the family.

"What to Eat Now" and the "Outline of 7 Basic Foods" are suggested helps available from the Division of Nutrition, Texas State Department of Health. Foods containing Vitamin B stimulate the appetite. Those containing Vitamin A help to combat infections. Foods high in Vitamin C are needed because tuberculosis patients are often found to be deficient in this vitamin. Vitamin D is needed to insure proper use of calcium by the body. Foods high in protein, calcium, and iron, supply repair materials and help build up the mineral reserve. All of these desirable food elements are found in a well-balanced diet.

Complete rest, in tuberculosis, means lying in prone position with physical and mental exertion reduced to a minimum. Worry and excitement are strenuous exercise and may cause over-exertion. There may be many factors in the family situation conducive to worry. Financial conditions, tensions resulting from overcrowding, inability to accept the diagnosis of tuberculosis, fear of disgrace, or the physical condition of other members of family all may contribute to the problem. The increase in respiratory rate resulting from over-exertion places an excessive burden on the lung and interferes with healing, just as motion in a fracture retards union of the parts. Keeping the respiratory rate at a normal minimum by resting gives nature a chance to heal the lesion.

Since tuberculosis is spread chiefly through familial contact, the family should be taught the importance of examination of all members of

the household as early as possible. Infancy and adolescence are crucial periods in a child's life. Periodic examination of contacts, as advised by the family physician, is essential in controlling the disease. Rigid adherence to the rules of health and regular medical examination are necessary. The essential element of a health program for contacts with a primary infection is the observation of personal hygiene, recognized as desirable for the maintenance of health for every individual. In special cases the physician may recommend additional care.

In visiting families when a patient is to be hospitalized, the nurse should be mindful of the fact that there are certain emotional reactions in accepting such a change in living. Feelings of stigma and inferiority, worries about employment and income, fears about recovery, and the effect on other members of the family are all present whether they are expressed or not. Preparation of the patient and the family for favorable acceptance of hospital routine is very important. It is helpful if the nurse explains something about sanatorium life to the family. Some of the phases for consideration include: Visiting hours, personnel routines, food, recreational facilities, rehabilitation program and necessary clothing. The length of sanatorium stay is regulated by law.

Teaching aids. Demonstration is the most effective teaching tool that the nurse has at her disposal.

Literature is available through the local and state tuberculosis associations. Some of the most effective pamphlets for teaching the patient and his family about tuberculosis are given in the section on Home Visiting.

Motion pictures are available through the State Health Department

and the State Tuberculosis Association. If space and time permit, movies can be used effectively in clinics.

### Recording

Detailed instructions for the use of the Tuberculosis Record, M-911, are given in the Manual of Records and Procedures. As much information as possible should be obtained and recorded from available sources in the Health Department and cooperating community agencies before the nurse makes a visit in the home. Important points to be noted on the record are the ability of the patient and his family to put instructions into practice, and the referrals to and from other agencies.

### Clinics

The basic principles of clinic operation as outlined in the section on clinics, may be applied to the tuberculosis or chest clinic. The greatest difference is that in a tuberculosis clinic the service is for individuals with a communicable disease; therefore, communicable disease precautions must be observed.

The functions of a tuberculosis clinic are: Diagnosis, consultation, supervision, treatment, and education. The scope of the services offered in clinics throughout the state varies according to community facilities. Only a few health units maintain and offer all the services of a tuberculosis clinic. In some places the clinics are maintained and operated by the city-county hospital, in other localities they are maintained and operated by the local tuberculosis association. In practically all instances the public health nurses in the local health units assist in rendering services.

Due to the many varied clinic arrangements which exist throughout the state, no attempt has been made in this manual to set forth detailed procedures. These depend, as stated above, upon the facilities and services available. However, the nurse should have knowledge concerning underlying principles of the procedures and technics which are part of the clinic activities, in order to assist in carrying out the services.

The purpose of aseptic technics is to prevent the dissemination of disease producing organisms. The application of the precautions instituted is based upon the present knowledge of the disease, and the ways in which it is spread from one person to another. Cap, mask, gown, and handwashing technics are essential to good nursing care of various communicable diseases. With these facts in mind, the application of technics that are practicable and safe in tuberculosis nursing in our public health activities has two objectives:

To provide a clean service for the individual patient and to introduce protective measures for the workers coming in contact with infectious tuberculosis

To improve housekeeping procedures to the point where the dissemination of tubercle bacilli are, insofar as possible, eliminated from the environment.

In the transmission of tuberculosis modern medical opinion leans strongly toward inhalation as the most important channel of contact. The mask is the only device which could be applied to break the contact, and yet it is one about which there is much controversy and difference of opinion.

Some of the most recent information on the use of masks in tuberculosis has been presented by McNett.\* The mask is made by using three thicknesses of 40 x 44 inch gauze with three thicknesses superimposed in the center, making six thicknesses in all. They are tucked to fit the contour of the face and are tied by two strings rather than the conventional four strings.

Some points to be remembered about masks, regardless of where they are used: The supply of masks should be sufficient to permit changing every hour; if the mask is removed or untied it should be discarded; covered containers should be provided for soiled masks.

Some common errors in mask technic are made by improper handling and adjustment of the mask, the mask being worn carelessly, and not completely covering the nose and mouth.

Services. Activities may be classified into diagnostic and treatment procedures. Diagnostic procedures include radiography of the chest, physical examination, sputum studies, and tuberculin testing. The only treatments usually offered in the clinic are pneumothorax refills or aspiration of fluid.

Equipment and facilities. The essential equipment for a clinic includes roentgenogram and/or photofluorographic unit, fluroscope, pneumothorax machine, linens, syringes, needles, and sterilizers. Laboratory facilities for sputum studies should be available.

X-rays. Photofluorographic units are operated by a few health departments, as a case finding procedure for special groups, such as food handlers, maternity clinic patients, etc. It is not necessary to undress

\*"The Face Mask in Tuberculosis", by Esta H. McNett. American Journal of Nursing, Jan. 1949, pp. 32-33.

the patient for this type of chest X-ray.

Roentgenogram, 14 x 17 or 11 x 14 inch film, is usually considered necessary for diagnosis and medical supervision of a case of tuberculosis. The patient is undressed to the waist and supplied with shoulder drapes before being directed to the X-ray room.

Fluoroscopic examinations are sometimes used as a screening procedure, like the tuberculin test, for selected groups. This examination is made by the physician.

Tuberculin testing. For a description of the procedure, interpretation, and significance refer to Section IV of "Immunization Procedures and Care of Biologics, No. 8682," published by the Texas State Department of Health.

Temperature taking. Temperature, pulse, respiration, and weight are routinely taken on all clinic patients. The same thermometer technic is used as given on page 66. There should be a sufficient number so that a used thermometer may stand in 70% alcohol for 10 minutes before being put into another person's mouth.\*

Pneumothorax. The equipment and procedures may vary, but the basic principles are the same. The following is a list of equipment necessary for the procedure:

GENERAL

EMERGENCY TRAY

Treatment table, pad	2 cc. syringe
Pillow	26 gauge, 5/8 inch needle
Pneumothorax apparatus	Alcohol sponges
Table for apparatus	1 cc ampoule adrenalin chloride
Emesis basin	1:1000
Hand basin	2 cc ampoule caffeine-sodio-benzoate,
Cover containers for waste, and	7½ grains
soiled linens	Aromatic Spirits of Ammonia

\*Based on "Alcohol as a Disinfectant Against Tubercle Bacilli," by C. R. Smith. Public Health Reports, 62:36, September 5, 1947. p. 1295.

Gowns for physician, nurse  
Masks, in covered containers  
Shoulder capes for women  
Tissue squares  
Adhesive  
Scissors  
Containers of alcohol sponges  
Tincture of Metaphen

#### STERILE SUPPLIES

Needle number 18 to 20 gauge,  $1\frac{1}{2}$  to 2 inches, long bevel, and a sharp cutting edge, preferable for refills.  
Needles, number 24 to 26 gauge,  $5/8$  inches, to begin the infiltration of anesthetic  
2 cc Luer Lok Syringe  
2 medicine glasses  
6 inch cotton wound applicators, large supply  
Small gauze squares, large supply  
Pneumothorax cape with 2 inch square opening in the center  
Kelly clamp  
Rubber gloves  
1% procain or novocaine  
Thumb dressing forceps in container of 70% alcohol  
Rubber tubing 27-30 inches long,  $7/16$  inches diameter  
Small glass connecting rod

The clinician should wear gown, mask, and sterile gloves. The assisting nurse should wear a gown or apron and mask. Her hands should be clean but not sterile. The patient should be masked or supplied with tissue squares. Each patient is given a fluoroscopic examination before treatment.

Position of the patient on table. If the needle is to be inserted posteriorly the patient lies on his unaffected side with his arm, flexed at the elbow, over his head. A pillow or a roll may be placed under his chest to widen the intercostal spaces on the side to be entered. If the needle is to be inserted anteriorly, the patient lies on his back. A small flat pillow may be used under the patient's head. The paper towel

or napkin under the patient's head should be changed after each treatment.

Cleaning of skin and draping. The nurse should prepare the skin using a rotating movement, starting at the site to be entered and continuing until about four inches of skin surface is prepared. Applicators should not be too full of antiseptic since skin surface must not be left with excess moisture. Each applicator must be used only once.

The physician will drape the patient, using the pneumothorax cape. He then infiltrates the area with procaine first using the small needle and two cc. syringe. He then inserts the pneumothorax needle, using the same syringe for deeper injection of anesthesia and entrance into the pleural space.

Pneumothorax machine. The rubber tubing of the machine, which is ready for connection with the needle should be handed to the physician by the nurse. The machine is operated by the nurse under the direction of the physician. The pressure reading is taken by the physician and the injection of air is started. Readings are usually taken with each 50 cc. of air injected. The pressure reading should be written on the patient's record before and after giving the pneumothorax refill.

As soon as sufficient air has been given, the needle is removed, and the nurse should apply a small dressing which may be held in place by adhesive tape.

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## VENEREAL DISEASES

Venereal disease nursing as a part of communicable disease services includes the prevention and control of venereal diseases as an integral part of a generalized public health nursing program.

### Objectives

1. To develop an awareness of venereal diseases through education of the individual, the family, and the community
2. To assist in reducing the incidence and prevalence of venereal diseases
3. To assist in restoring to health every person infected with a venereal disease.

### Functions

1. To assist in finding cases and contacts and in securing medical examinations and supervision for them
2. To be able to interpret state and local laws pertaining to venereal diseases
3. To assist in making epidemiological investigations, and in securing the reporting of all cases
4. To give or assist with nursing care through demonstrations or supervision of care given by relatives and attendants
5. To promote continued treatment by assisting the patient to follow prescribed routines
6. To teach the patient and the family the importance of personal hygiene and the precautions to be taken to prevent the spread

of infection

7. To teach scientific facts concerning these diseases in an effort to eliminate some of the stigmas associated with them
8. To assist in the integration of every phase of this program with all individuals and agencies concerned.

### General Information

The very nature of venereal disease is such that it touches all fields of human conduct. Thus each case is a problem which cannot be solved by any one approach. Each must be approached from a medical, social, economic, and educational point of view.

To reduce the incidence and prevalence rate of venereal disease, the medical, epidemiological, and educational phases of the program should be emphasized.

Infectious persons must be treated medically and rendered non-infectious. This is the medical approach which includes nursing and laboratory services. Therefore, it is imperative for the nurse to be familiar with all aspects of the venereal disease control program, if an effective service is to be rendered.

The medical aspect of the program, to be adequate, must satisfy minimum requirements. That is, every person seeking a service from a venereal disease clinic should be seen in private by a physician during the first visit and as often thereafter as indicated.

The epidemiological phase of the program is closely integrated with the medical and should consist of: Contact investigation; early and thorough examination of all contacts, and immediate investigation of cases

as outlined in the section on Case Selection.

The educational phase of the venereal disease program should be so planned that there will be a continuous rather than a sensational, sporadic type of campaign.

Epidemiological investigation. Epidemiological investigation or contact tracing is a method of locating and bringing in for medical examination all persons named by a person infected with venereal disease as having been his contact over the period of time when he might have acquired his disease and transmitted it to others.

The requisites essential for the nurse's effective performance in epidemiological investigation include a thorough knowledge of: The nature of the disease, methods of transmission, incubation period, signs, symptoms, and stages, treatment schedule, and available facilities. A broad understanding of human behavior and social forces is also necessary.

Contact investigation begins with the first visit of the patient to the clinic. What happens to him during the period in which his diagnosis is being established determines largely his attitude toward disclosing information regarding his contacts. The atmosphere of the clinic, the way the receptionist speaks to the patient, the attitude reflected in the remarks made by patients in waiting rooms, all cause conscious or subconscious reactions in the individual.

Naming of contacts must precede tracing them. Securing this information depends on what the patient knows or chooses to reveal. Poor memory and silence are his weapons. Fear of trouble for self or others may cause necessary information to be withheld.

In addition to, or in lieu of a name, if unknown, it is well to have

a description of the contact as supplementary information. The nickname of the contact is important to obtain. This should be used only with the greatest skill or one's purpose may be defeated.

Once the contact has been named clearance is necessary to ascertain whether or not he is already under medical care. Master index files or whatever name files are available locally, should be checked before proceeding with the epidemiological investigations.

Appointment cards may be given the patient for his contact when he wishes to assume the responsibility for bringing his contact in for examination. Patients who are married should be encouraged to assume responsibility for informing and bringing the marital partner to the clinic for diagnostic observation. If they so desire, patients should also be given the privilege of bringing in other sexual contacts.

Special delivery letters or telegrams are sometimes used when the contact is a marital partner from whom the patient is separated or if the contact is unmarried.

Epidemiological investigation by either letter or field visit should include the following types:

Contacts of primary and secondary syphilis. These include sexual contacts and household contacts under fourteen years of age who have had close association, such as sleeping, nursing, etc., with the original patient.

Contacts of early latent syphilis with known infection of four years or less or individuals under twenty-five years of age. These include sexual contacts for the preceding twelve months about whom the patient is able to give identifying data, and children under

fourteen years of age who have had close contact with the patient.

Contacts of congenital syphilis. These include parents and siblings.

Contacts of female patients with late syphilis, if the known duration is over four years, or if the duration is unknown, but the patient is over twenty-five years of age. These include the marital partner, except when the patient is known to have acquired the disease five years or more before marriage, and children under twenty years of age, known to have been born since the patient acquired syphilis.

Contacts of male patients with late syphilis. This includes the marital partner, except when the patient is known to have acquired the disease five years or more before marriage. Children are included only when the mother is also infected.

Female contacts of gonorrhoea.

Interpretation of laboratory tests. Laboratory tests and their interpretation are of great value in diagnosing cases and as an evaluation of cases for follow-up services, especially in cases of syphilis.

The blood test is not used to determine the infectiousness of a patient with syphilis and should not be interpreted in this manner.

Generally speaking, serological tests for syphilis are examinations to determine the presence or absence of an unknown substance called reagin, produced by the individual host in response to infection.

A complement-fixation test and flocculation or precipitation test are the two general types used in the sero-diagnosis of syphilis. Both of these tests can be performed in a qualitative and quantitative manner, which is most significant in venereal disease control.

The qualitative serological test for syphilis is a standard one

performed to determine only the presence or absence of reagin in the patient's serum. It is important as an aid in the diagnosis of the disease.

The quantitative test measures the amount of reagin in the patient's serum. This test should be used to evaluate the results of therapy; to determine the likelihood of relapse under treatment, or in serologically resistant subjects.

In the quantitative serological test the amount of reagin in the patient's serum is commonly reported in terms of titre or Kahn Units. In cases where the titre or Kahn Units fluctuate or the titre shows a persistent rise, the doctor should be notified of this fact for an evaluation of the case. This is discussed in "The Venereal Disease Bulletin, VD-9238," published by the Texas State Department of Health.

Examination of the spinal fluid is important in the diagnosis of neuro-syphilis. A series of these examinations is beneficial in the evaluation of the syphilitic process in the central nervous system. An examination should include: Cell count, quantitative total protein determination, and quantitative serological test of the fluid. A colloidal test may be helpful when it is available.

The nurse should be able to interpret and understand the results of these tests as related to the regression or progression of the disease.

An outline of pertinent information on the five venereal diseases may be found in Appendix G.

#### Management of Service.

Case finding. The nurse's approach to a case finding program for

venereal disease should be fundamentally the same as her attack on tuberculosis, typhoid fever, or any other communicable disease. Since control of venereal diseases depends upon the use of technics that will break the "chain of transmission" between the host and the susceptible, a major portion of the effort should be directed to this end.

In a venereal disease service, effective case finding methods are the most essential tools for developing an adequate control program. In general, these activities fall into three groups: Education, contact investigation, and mass screen testing or blood surveys. All three are closely interwoven, and activities in each group extend into the three groups.

The approach to case finding programs varies in each community. The methods would depend upon the organization, but the basic principles would be the same in all communities, and in all case finding programs. An adequate epidemiological program should include:

Referrals from health agencies, private physicians, and others

An awareness of venereal disease in other services - maternity, pediatrics, cancer, tuberculosis, etc.

Medical examinations for school admissions, food handlers, barbers, expectant mothers, marriage candidates, hospital admissions, etc.

Mass blood testing in industry, etc.

Diagnosis, treatment, and interviewing in clinics and rapid treatment centers, etc.

Follow-up of contacts.

Case finding in a family health service. Because venereal diseases

are family and social problems and cannot be segregated from other health and social problems, the nurse who sees the family as a unit is an important factor in their control.

The unknown case may be discovered through: Recognition of symptoms which may indicate a venereal disease; skill in taking the family history; referral of all members of the family for medical supervision; and education of the patient and the family in the value of periodic medical examinations.

Case finding in maternal and child health service. The primary aim in case finding among the antepartum patients is to prevent congenital syphilis. An adequate program should include arrangements for early and continuous medical supervision of all antepartum patients. A careful history of symptoms and other pertinent information that may point to syphilis in the mother, prior to or coinciding with pregnancy, should be taken. Special note should be made of stillbirths, miscarriages, premature births, venereal disease in the sex partner, and swelling of inguinal glands.

According to accepted medical practice, routine serological tests of antepartum patients should be done at the beginning of pregnancy and repeat tests at the fifth and seventh month of gestation. However, for practical purposes the maternity clinics usually do routine serological tests on the initial visit and repeat them between the seventh and eighth month of pregnancy.

Manifestations of syphilis are likely to be markedly diminished by pregnancy. To be able to obtain effective results the nurse should develop an awareness of pertinent facts indicative of venereal disease

infection. The suspicious elements to note in antepartum patients are the same as in all syphilitic patients. Case finding in a maternity service would also include the inspection of the newborn. Congenital syphilis should be suspected in infants born of a syphilitic mother.

Suspicious elements that should be noted during the antepartum, postpartum, and newborn periods are found in the sections on maternity, child health supervision, and in Appendix G.

Case finding in school. The school nurse occupies a strategic position in a case finding program. She should be alert to symptoms of infectious venereal diseases. However, it should be kept in mind that congenital syphilitic children are not considered infectious at school age. Children with suspicious signs, such as saber shins, saddle nose, Hutchinson's teeth, etc., may serve as a means of locating other cases of syphilis, if follow-up work is done.

Case finding in industry. Opportunities in industry for venereal disease case finding may occur in connection with: Preplacement and periodic physical examination, observation of signs and symptoms in connection with other complaints, information found in health history, home visits, and mass blood testing programs.

Case selection. Case selection for follow-up should be based on the communicability of the case, and on contacts of infectious cases. The following order of priority is recommended:

Primary and secondary cases, within 24 hours after diagnosis

Sexual contacts of primary and secondary syphilis

Antepartum cases, regardless of the stage of the disease

Congenital syphilitic cases with open lesions and under two years

of age

Recurrence or relapse of early latent syphilis cases

Female sexual contacts of gonorrhoea.

Male contacts of gonorrhoea have been omitted because the appearance of symptoms usually influences them to seek medical attention before the contact tracer can make a field visit. Field visits are not recommended on late latent or late syphilitic cases except antepartum patients. An ordinary letter or appointment card is usually adequate.

Termination of Service. Service should be terminated for those cases which have received adequate treatment and have been dismissed from the clinic. Others to be terminated include: Cases which have received rapid therapy and have been adequately followed for one year; those who have received enough treatment in the clinic to render them non-infectious, and have missed treatment for four consecutive months and are not referable to a rapid treatment center; those who have left town or moved out of the area; and cases which have been recommended to be closed by the attending physician.

### Home Visiting

Home visits in a venereal disease control program are made for case finding, securing medical care for contacts and suspects, health teaching, and follow-up of cases that may need further observation or treatment. Visits should be made chiefly to infectious and potentially infectious cases, antepartum patients, and those presenting special problems.

There seems to be no particular hour which is better than another for home visits unless the habits of the patient and the family are known.

Methods of approach should be individualized as there are no fixed rules on how to divert suspicion of the nature of the visit from members of the family who are concerned in the matter.

Teaching content of the visit for a patient with early syphilis may include:

The nature of the disease

The mode of transmission and the communicability of the disease

Interpretation of the diagnosis

The purpose and the need for treatment

The rules for personal hygiene

The reason for examination of contacts

The necessary precautions, such as keeping personal articles separate, and abstinence from sexual intercourse until adequately treated

The importance of reporting to the doctor any reaction to drugs.

For patients with late syphilis the home visit may include:

Bedside care when necessary for demonstration purposes

Instruction regarding the non-communicability of the disease at this stage in ordinary, daily contacts

Assistance with problems of family adjustment

Recognition of social and economic problems in which the assistance of an outside agency is needed.

The home visit to early congenital syphilitics may include:

Instructions regarding the highly communicable nature of the disease in the newborn, and the need for precautionary measures, including the usual isolation technic

Arrangements for hospital care and treatment.

Adequate care of the patient with late congenital syphilis implies health supervision and teaching which includes:

Rare communicability of the disease after the first two years of life

The importance of emotional adjustment

Plan for treatment of the patient.

A contact needs to be approached cautiously and as a person who may have been exposed to venereal disease. He may have been wrongly named or he may have escaped infection. The term "source of infection" should be avoided as it tends to place blame on a contact. The fact should be emphasized that the person giving the information about the exposure did so from a desire to help. In answer to his query about the informant's identity the contact should be helped to understand that the information was given as confidential and with a desire to help; further, that this confidence is safeguarded in the same way he would want his confidence respected.

When a patient is unwilling for his diagnosis to be divulged to his family, and it becomes necessary for the nurse to go into the home, the suggestions given for case finding in a family health service should be followed.

In visiting sexual contacts, the nurse should ask to see the patient personally. She should introduce herself, but should not divulge the nature of her call to, or in the presence of, any other member of the household. The contact should be informed regarding the disease to which he has been exposed.

In some instances the family will demand certain information from the nurse before calling the patient. The nurse may state that the person had applied for medical care and that she has important information for him from the doctor or health department. If further details are requested the family should be referred to the patient. In selected cases the nurse may state that the person in question has been exposed to a communicable disease.

Contacts or cases of private physicians are visited upon request. The nurse's instructions should be based upon recommendations made by the physician. She should not refer such cases to the clinic, except as authorized to do so by the physician.

A note may be left in a plain sealed envelope for a patient or contact if he is not at home. It should request the patient to report to the health department, or to the private physician if it is a private physician's case, or to a room number at a given address. Care should be taken not to mention the name of the clinic or the disease in question.

Infinite tact and skill are absolute necessities in doing this type of work. The relationship of the infected person to his family and employer is extremely important. Tactlessness on the part of the nurse may cause a divorce or other marital difficulties, or the loss of a position.

The criteria to determine which of the above procedures to use would depend on the duration of the disease, the age of the person, and stage of the disease of the patient naming the contact.

### Teaching Aids

Language and observation have been discussed in the section on

interviewing, as methods of communication in a teaching situation. A third method is the use of visual aids.

Research has shown that effective visual education is one of the best ways to get the most information across to the greatest number of people in the shortest time.

Visual aids in a venereal disease control program should be used to reinforce pertinent points which have been made. The nurse should select aids that are applicable to each particular patient or each individual situation. The materials are available in a wide variety of types, quality, and usefulness. They include: Posters, illustrated pamphlets, film strips, movies, slides, wall charts, cartoon books, exhibit set-ups, etc.

Pictures and word stories designed to be used in interviewing patients are considered an effective means of strengthening given information. A word-story with accompanying pictures may be used with additional explanations as needed for each case. The nurse should use these visual aids in sequence. Flexibility in the arrangement and use should be provided by placing them in loose leaf form or on cards with proper guides.

Graphs and charts showing the incidence and prevalence of, and mortality from venereal disease in Texas and in the United States should be prepared and used when interviewing patients. These graphs and charts should be used as a method of reassuring the patient that he is not the only person having a venereal disease, but one of many.

Graphs and charts showing the incidence and prevalence of, and mortality from other communicable diseases should be compiled and used for comparison with the venereal disease situation.

Charts showing how other community organizations dovetail and cooperate with the venereal disease set-up are beneficial and should be used when plans for rehabilitation are being made.

Demonstration of procedures, whenever feasible, is another valuable teaching aid. This may include: Eye irrigation, various types of dressings, isolation precautions, care of the mouth during heavy metal injections, massage of the site of intramuscular injection to prevent discomfort, etc.

### Recording.

The keeping of accurate records is one of the most essential factors in a venereal disease program. These records should include a history and complete examination of the patient with the resulting diagnosis, recommended treatment, and follow-up.

"The five magic words - Who, Where, When, Why, and What" may serve as a guide.

Who - name of the patient, the name of the patient's contacts, etc.

Where - address, landmark, detailed directions for finding the patient, contacts, etc.

When - when was this case opened? When was this case last seen?

Why - why was this case opened? Do you have a reason for following this case and keeping it in the active load?

What - what is the patient's diagnosis? What is being done? Is the case under medical care? If not, why not? Is the patient or family gradually learning to stand on their own feet from a positive health angle?

Because of the confidential nature of the patient's records in a venereal disease program, the files should be kept in a safe place, but accessible to the personnel working in the venereal disease program.

Complete instructions and samples of records may be found in the Venereal Disease Section of the Record Manual.

### Clinics

Venereal disease clinics should be set up as a part of the general clinic program where possible. In general, the basic principles of clinic operation as outlined in the section on clinics may be applied to a venereal disease clinic. Definite local policies and procedures, depending on personnel and facilities, should be made and followed for each clinic established.

When planning clinics, day and night sessions should be considered in the arrangement, the latter to be held for patients who are unable to attend day clinics because of fixed responsibilities. The time factor for domestic workers should be kept in mind. Consideration should also be given to sessions for children. It is suggested that these be included in the general clinic schedule where the physical set-up is suitable.

The present recommended methods of treatment for syphilis and other venereal diseases have brought about changes in many phases of the program. Emphasis is being placed on health teaching, case finding, diagnosis and referrals to rapid treatment centers, rather than on case-holding for treatment in the clinics. Another trend is to concentrate on the emotional as well as the physical status of the individual and his family.

The service rendered in a venereal disease clinic should include diagnosis, referrals for treatment, or clinic treatment, and in a few instances, consultation service, case finding, epidemiology, and educational activities involved in the control of venereal diseases. Diagnostic procedures should be based upon case history and physical examination supported by laboratory and other recommended tests.

### Treatment

Advances and changes in venereal disease therapy have been so great recently that no attempt will be made to include a treatment schedule. There are a few important factors that every nurse should keep in mind.

She should not administer injection therapy unless she has had special training in the proper technic and a physician is present. Preparation of drugs and intravenous and intramuscular technics as given in Dermatology and Venereology for Nurses, by Stokes and Taylor, pages 275-297, should be reviewed for more recent recommendations in treatment technics.

The awareness of drug reactions cannot be overstressed. In some cases there have been serious reactions from drugs used in the treatment of venereal diseases. It should be the nurse's responsibility to understand the principles with regard to the management of these emergencies. She should have adequate equipment, including an emergency tray, in readiness and available at all times. The tray should include:

- Adrenalin or epinephrine ampoules
- Aromatic Spirits of Ammonia
- Atropine hypo tablets
- 2 sterile 2 cc. syringes
- 5/8" needles, 25 gauge
- Drinking cups
- Alcohol sponges

### Rapid Treatment Center Referrals.

It is the responsibility of the physician in charge of the venereal disease control program to make the decision to refer patients for rapid treatment.

The necessary information and instructions for a patient who is to have rapid therapy should be recorded on the individual record by the physician at the time of his referral.

The patient should then be referred to the nurse in the clinic for an interpretative interview. She should explain that the length of stay at the center is approximately 10 days, depending upon the type and stage of the disease. She should explain rules, regulations, and routine procedures of the centers, such as the admission procedures, also that no visitors are allowed at the centers. The nurse should give the patient a list of clothing and articles to be taken with him. She should also assist the patient in making plans for transportation.

These instructions are given in addition to an explanation of the disease, treatment, and other information pertinent to the case. At this time the nurse should endeavor to obtain the names of all contacts. The contacts named should be listed on the back of the transcript for the interviewer's information at the rapid treatment center. This will eliminate duplication in reporting contacts. Contacts obtained by the clinic should be recorded on VD-1A Form and the follow-up begun.

The transcript should be prepared by the clerk from the patient's record and given to the individual in a sealed envelope at the time of his departure, or handed to the bus driver if transportation is furnished by the State Department of Health.

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## MATERNITY

Maternity nursing service as a part of the generalized public health program includes adequate care and guidance for the mother throughout the entire maternity cycle in order to conserve the life and health of the mother and infant.

### Objectives

1. To assist in conserving the life and health of every mother and child by making available maximum facilities for medical, dental, and nursing service
2. To conserve family life by helping with the adequate preparation of young men and women to assume the responsibilities entailed in the partnership of marriage.

### Functions

1. To know and be able to interpret federal, state, and community facilities available for maternal and child care
2. To know the needs of the area to be served, through surveying existing conditions and by studying morbidity statistics
3. To teach, in appropriate circumstances, factors regarding anatomical and physiological functions of the human body in preparation for the responsibilities of parenthood
4. To teach the value of and to assist, in so far as possible, with obtaining medical, dental, and nursing care throughout the entire maternity cycle
5. To give special attention to those mothers planning to be

delivered by midwives

6. To assist with clinic organization, when possible, and to participate actively in maternity clinics
7. To assist the family to make the necessary social, economic, psychological, and physical adjustments to the pregnancy
8. To assist the physician in interpreting to the patient and her family the importance of providing optimal environmental conditions for the individual family and of practicing good hygiene, especially during pregnancy
9. To assist in teaching classes in family living as a part of adolescent and adult education.

#### Management of Service

Case finding. Maternity case finding should receive the constant attention of the public health nurse as she visits families for health service. Cases may be reported by private physicians, clinics, neighbors, friends, midwives, school personnel, ministers, and the patients themselves.

Case selection. Ideally, each maternity case should be visited each month by the public health nurse throughout the entire cycle of pregnancy and the postpartum period. However, since nursing personnel is usually limited in number, certain selection of cases must be made. This must be done carefully if maximum service is to be given to those cases whose need is greatest. It is suggested that preference be given to patients in the following order: The primipara who is not under medical care, or who is under the care of a midwife; complicated cases

such as a placenta praevia, eclampsia, bleeding, etc.; women having communicable or constitutional diseases such as measles, tuberculosis, or venereal disease; grand multiparae (sixth pregnancy or more); multiparae; and cases under medical care, upon the request of the attending physician.

Case load. The nursing case load should be broad enough to give a good community service, but it should be limited sufficiently to fit into a balanced family health service.

Frequency of visits. This will depend upon the size of the case load in the area served, as well as the status of the cases selected for visiting. Generally speaking, a monthly visit should be made during the first six months. Bi-weekly visits should be made until the eighth month of gestation. A visit every ten days should be made during the last month of pregnancy. The visits of the nurse should be spaced to alternate with the patient's visits to the physician. The number of visits may be reduced if the patient attends a maternity class or conference.

The frequency of nursing visits during the postpartum period depends upon many factors. If the patient is hospitalized, the nurse may not see her for a few days following delivery. Special effort should be made by the nurse to visit the patient in her home soon after her return from the hospital if possible. The practice of early ambulation places increased responsibility upon the public health nurse to do closer nursing supervision for the mother and the infant.

In the case of a home delivery, ideally, the nurse should see the patient within the first twenty-four hours following delivery; unless

otherwise indicated, on the third day, and on the eighth day to be sure that the patient is receiving adequate care. She should visit all postpartum cases around the sixth week and the third month to be sure that they have received both postpartum medical examinations.

Termination of service. Service to the individual patient is terminated when the mother has reached the third month postpartum. The record should be closed immediately if the patient expires or moves out of the county.

### Home Visiting

The nurse should obtain as much pertinent information as possible regarding family, social, and economic data, and the history of previous pregnancies, through observation, by listening to the patient's spontaneous remarks, and by discrete questioning. The nurse should use her own judgment as to the amount of information she should obtain on the first visit.

Over-teaching of the maternity patient should be avoided. She is often emotionally disturbed, uncomfortable, or easily fatigued. It is preferable to stress the more important points and to teach a few facts during each visit. Should the patient seem concerned about a special problem it would be well to try to help her with what she believes to be important before attempting to do much planned teaching. The nurse should be sensitive to the patient's feelings and judge the amount of information the patient is ready to accept. Instruction may be planned according to the patient's period of gestation. If she is seen early in pregnancy, the following may serve as a guide to the spacing of information

and teaching offered. The husband should be included in the teaching if he is at home.

First trimester. The patient's physical changes at this period cause her to be primarily interested in herself. She will want to know what to expect and why these changes occur. The changes peculiar to this period are: Amenorrhea, vomiting, fullness of breasts, increased salivation, increased urinary attempts, enlargement of the abdomen, and mental and emotional changes. The nurse's teaching during this period should stress the hygiene of pregnancy, according to the physician's instructions. The reason for early medical and dental supervision should be discussed. The patient should be prepared for her visit to the physician. The importance of blood pressure readings, and blood and urine tests should be explained. An idea of the procedure used for these tests should be discussed as a means of alleviating possible fears.

The seven basic foods and their use in the mother's body, as well as in the development of the fetus, should be interpreted. The need of foods rich in protein should be stressed, pointing out among other things, the theory of their relationship to increasing lactation.

The type of clothing best suited to the mother's needs should be discussed, with an explanation of why garments should hang from the shoulders, why constricting bands should be avoided, and why the breasts should be supported rather than tightly bound.

Exercise, as recommended by the attending physician, fresh air, recreation, the need, purpose, and manner of regular rest periods should all be discussed. Demonstrations of how to rest with the feet elevated should be given.

Personal cleanliness, daily baths, and the type of bath most practicable for the particular patient should be discussed.

The value of regular elimination and the importance of avoiding medication, laxatives, etc., unless ordered by the physician, should be explained.

The value of having the Rh factor and blood type determined should be explained in simple terms, if facilities for this service are available in the community.

The patient should be cautioned to report vaginal bleeding to the family physician immediately.

Some of the services and demonstrations given by the nurse are:

Inspecting the mother's teeth, breasts, nipples, the condition of the skin, enlarged veins, swelling of hands, feet, ankles, etc.

Taking and recording the patient's temperature, pulse, and respiration

Taking the patient's blood pressure, and testing a specimen of urine for albumen, if the attending physician approves

Exhibiting suitable articles of clothing, or pictures of them, which may be worn by the expectant mother. If patterns are available they may be loaned

Showing and explaining to the patient approved pamphlets, to emphasize points of instruction, such as: "Know Your Foods,"

"Prenatal Care," etc. These and other carefully selected pamphlets on food, rest, clothing, etc. may be given to the patient if she wishes to read them.

Second trimester. The physical and emotional changes in the patient

may be more pronounced during this period. The nurse may begin her visit by discussing the idea that pregnancy is a normal experience, not disease or illness. However, it is well to be on the alert for signs of pre-eclampsia during this period, including: Early weight gain, headaches, abdominal pain, edema, and unexplained elevation of blood pressure. The patient will gradually become less absorbed in herself and will show more interest in the new baby. She soon becomes aware of the fetal movement. The abdominal enlargement is more noticeable and the fetal heart beat can be heard after about the sixteenth week. Because of these physical signs, the mother's questions usually revolve around these conditions. Teaching by the nurse may include:

The development of the fetus

The scientific explanation of "marking the baby." (The following is quoted from Expectant Motherhood by Nicholson J. Eastman, M.D., page 37. "There is not the slightest nervous connection between mother and child; in other words, no possible pathways along which any impulses, pleasant or otherwise, could travel. The blood of the mother is likewise separate and distinct from that of the child. Furthermore, the infant is completely formed at the end of the sixth week, --- at a period when most women scarcely realize they are pregnant; and, almost without exception, the causative mental shock or experience which is alleged to have brought about the marking occurred much later, long after the organ in question was in its final state of formation.")

The preparation for the baby, such as layette, bath equipment, furniture, and the bath tray, Similar articles of equipment may

be improvised. The husband may be encouraged to make simple chests or a simple bed. (Visual materials, including drawings, illustrated books, exhibits, etc., to demonstrate the use of improvised equipment, are valuable teaching tools.)

The preparation for, and importance of breast feeding the baby

A review of dietary needs of the mother, and approved weight control measures

The importance of continuing regular visits to the physician and of reporting to him immediately any signs of vaginal bleeding.

Some of the demonstrations which may be given by the nurse are:

Setting up a baby bath tray

Making small and large newspaper pads.

Third trimester. This period may be compared to the climax of an interesting story. The family and friends are engrossed in the outcome of the patient's pregnancy. Disturbing physical symptoms continue to be more frequent as pressure increases; constipation may be aggravating; fatigue may be more marked. The nurse should be alert for signs and symptoms of eclampsia, such as: Headache, dizziness, blurred vision, increase in blood pressure, rapid weight gain, etc. With the physician's recommendations in mind, the nurse may instruct the patient during this period regarding:

The care of the nipples by bathing them with soap and water, rinsing well, and patting them dry. All massage or pulling at the nipples should be avoided

The dietary needs, with special attention to weight control

The need to report immediately to the physician vaginal bleeding

Provision of adequate body cleanliness by the use of shower and sponge baths. The nurse may wish to explain why tub baths should be avoided during this time. (Birth Atlas published by Maternity Center Association or other anatomical charts may be used to stress the natural awkwardness of movement which makes tub bathing dangerous.)

Preparation for delivery. The nurse should teach the patient or the person who plans to be with her at the time of delivery to get ready for either the home or hospital delivery, depending upon the plan of the patient.

Suggestions for home delivery may be found in Appendix H. Teaching may also include:

The use of improvised equipment found in the home

The wrapping and sterilization of supplies needed to supplement those furnished by the attending physician

Selection of a room and arrangement of the furniture for the delivery, including the protection of the bed with newspapers or waterproof sheeting; the use of bed blocks as elevators; the most convenient arrangement of furnishings and supplies used in the delivery and the postpartum period; the proper method of sterilizing kettles of water; and a safe method of warming the baby's bed

Provision for adequate care of the patient and other household members during delivery and the postpartum period.

For a hospital delivery the nurse should teach the patient concerning:

The careful selection of a safe hospital

The choice and preparation of clothing and supplies to be taken

to the hospital according to the particular hospital's rules and regulations

Family planning for the care of the mother and her baby upon their return home

Some method of notifying the nurse of the baby's birth and of the mother's return from the hospital.

The nurse should also instruct the patient concerning recognition of the following signs of labor: Lightening, mucous plug, bloody show, rupture of bag of waters, and rhythmic and regular contractions. She should encourage the patient to keep in close contact with the physician. The patient, her husband, and the family should be reassured and encouraged. Both parents should be taught the importance of birth registration and of prophylaxis for the eyes of the newborn.

Postpartum care. In postpartum home visits, emphasis should be placed on teaching the family, and one responsible member particularly, to give the mother and baby safe and observant care.

On the first visit the nurse should inquire about birth registration, the prophylaxis used for the eyes, and voiding and defecation of the infant.

The infant should be cared for first if he is awake and irritable, otherwise the mother may receive care first. Since the nurse should wash her hands well between patients she may use her own judgment in regard to which one should be given attention first.

Before giving care to the mother, the nurse should wash her hands carefully and teach the attendant and the mother the importance of this procedure. Since the same organism which causes Thrush in the baby's mouth

may be found in the vaginal tract of the mother, she should be taught that it is of utmost importance to wash her hands after she has given herself perineal care. If for any reason she has had her hands below her belt the mother should be instructed to wash her hands. Perineal care is usually given by the attendant while the patient is in bed. (Section on perineal care). The patient may administer this care to herself if she is ambulatory. Careful handwashing should be stressed in either case.

The average mother usually experiences a period of depression. It is a normal reaction, and is a result of labor and the process of adjustment. About the third day the mother should be carefully observed for mental and emotional adjustment to the new baby. Kindness, cheerfulness, and understanding will usually help the patient considerably.

The nurse should discuss and demonstrate the proper application of breast support and observe the condition of the nipples and breasts; she should also demonstrate perineal care and discuss the proper method of handling perineal pads. She should check the perineum; observe and record the type and amount of lochia, as well as the condition and care of sutures, if the latter are present. The type and amount of elimination; position of the fundus; type and amount of food taken by the patient; and the patient's emotional, mental, and physical condition should also be of concern to the nurse.

If the patient is still in bed, the nurse should instruct her regarding the proper process of getting up, keeping in mind the wishes and instructions of the attending physician. The importance of the postpartum examinations at the sixth week and in the third month should be explained to the patient and her family.

## Maternity Classes

In maternity nursing, mothers and fathers classes are an economical and stimulating means by which groups may explore together a series of problems and interests. Where a maternity conference is held, the mother's class should be an integral part of that service. Where no conference is available, mothers and fathers classes may be organized as a means of health education.

There are a few underlying principles to be considered in the organization of classes:

A comfortable, well-equipped classroom in a convenient location is desirable

Advance registration of students is beneficial

Personal contact with prospective pupils for the purpose of explaining the objectives of the class is usually an effective means of organization

The number of students enrolled should be limited to facilitate group discussion and to provide opportunity for some individual attention

Teaching content should be backed by medical authority

Adequate and competent preparation for each lesson is necessary

The teacher should examine closely her own attitudes relative to marriage and family living to be sure she is qualified to teach these classes

To be effective, visual aids must be well planned

If at all possible, time should be arranged for individual counseling and guidance, either before or following the class. The nurse might also announce her office hours and give appointments as indicated.

Classes should be held at convenient hours for the group. The

length of the class period will depend largely upon the group.

Since it would be impractical to offer lesson plans which could be used by all nurses in various sections of the state, teaching suggestions are limited to units, topics, and types of demonstrations. The local nurse may wish to use this information as a guide in planning class content.

Unit outline suggestions for mother's classes:

- I. Anatomy and physiology of reproduction
- II. Hygiene of pregnancy
- III. Nutrition in pregnancy
- IV. Preparation for the baby
- V. The birth day
- VI. The new mother and her needs
- VII. Meeting the needs of the new baby

Demonstrations and/or practice may include:

Types of clothing

Folding diapers various ways

Baby bath tray preparation

Bathing the baby

Making cotton pledgets

Preparing newspaper pads

Oil can formula preparation

Improvised equipment, including baby bed, chest of drawers, play pen, etc.

Unit outline suggestions for father's classes:

- I. Anatomy and physiology of reproduction (usually taught by an obstetrician)
- II. The mother's needs
- III. Preparing the home and family for the new baby
- IV. The baby is born
- V. Care of the mother and baby

Demonstrations and/or practice may include:

- Bathing and dressing the baby
- Nursery equipment
- Oil can formula preparation
- Improvised or simply made toys

Units may be broken down into as many lessons as the individual nurse-teacher feels is necessary and as time allows. (Suggested lesson plans, Appendix I).

A list of films obtainable from the State Department of Health may be secured from the Division of Health Education.

### Maternity Conferences

The purposes of the maternity conferences are: To help provide adequate and regular medical and nursing supervision throughout the maternity cycle; to instill in parents a realization of the responsibilities of parenthood; and to teach the hygiene of pregnancy and its relationship to a normal, safe delivery.

Case selection. This should follow the same order as for maternity nursing service.

Functions of the public health nurse. This is discussed in the section on clinics.

Functions of the volunteer aide. The duties of these workers in the maternity conference should be assigned and closely supervised by the public health nurse. In addition to those listed in the section on clinics, the following tasks may be assigned:

To weigh patients, take temperature, pulse, and respiration and record same

To supervise the play of children, who may come with their mother

To discuss merits of clothing exhibits, and to assist patients in cutting patterns.

Procedure. Maternity conference procedures should be carefully analyzed to ascertain that every opportunity for teaching is being utilized. At least three rooms should be available if there is to be adequate space for ten to twelve patients.

It is desirable to have two nurses and one volunteer aide or more to conduct the conference, to assist the clinician, and to give maximum instruction. Two plans of procedure are suggested.

Plan I. (Group teaching after examination by clinician). The receptionist or nurse in room one should greet the patients in the waiting room and see that they are comfortably seated. She should pull the patient's record, fill out laboratory cards, weigh, take temperature, pulse, respiration, and send her to collect a urine specimen. If the patient is new, the receptionist should fill out the name, address, and age portion of the record and laboratory cards.

The nurse in room two should take the interval history and write the information on the same part of the record as the physician uses to record his findings. This information should be of value to him. The nurse can

give much individual instruction at this time, but she should budget her time. The nurse should also take blood pressure and explain its significance. Venous blood should be collected for serological test for syphilis. Hemoglobin should be checked. Urine should be tested for albumin, using Roberts Reagent, Clinitest, Esbach's Solution, or a similar preparation, according to a written procedure. Findings should be written on the record. If blood is collected for Rh factor, the reason for this procedure should be explained. The patient should be directed to the dressing room to prepare for her examination. New patients should disrobe completely; return patients may remove panties only.

In room three, the examining room, facilities for privacy are most important. It is desirable that the nurse, in whose district the conference is held, be the one to assist the physician during the examination of the patient. She should always be alert in considering the patient's feeling of embarrassment regarding the physical examination. Most of this feeling can be relieved if the nurse is considerate when draping the patient, and has explained carefully the procedure to follow, as well as the reason for disrobing.

The nurse should watch the facial expression of the patient for signs of puzzlement over the clinician's instructions. It should be the nurse's responsibility to help the patient understand all instructions before she leaves. She should also be sure that all records are completed. The receptionist may post the next appointment as the physician has indicated.

Following the examinations, the mothers should be asked to gather in the waiting room. After the physician has departed, a twenty or thirty minute class should be given from written lesson plans. Demonstrations

and exhibits may be given regularly. If lectures are given, they should be presented in a series so that a relief nurse could easily follow the lesson plans.

Plan II. (Class before clinician's arrival). The receptionist in room one should pull records and make out laboratory cards. The first nurse may assist until the mothers gather, when she should teach class according to a planned series of lessons and demonstrations. Lessons should be written as a series.

In room two, the volunteer aide or clinic attendant should weigh patients, collect urine specimens, take temperature, pulse, and respiration and record the findings on the patients' records. She may motion for the mothers to leave the class group as needed; if this is done quietly, it should not unnecessarily disturb the class.

The second nurse should take the interval history, record it, take blood pressure, and do the necessary laboratory work, according to clinic procedure. After this, the mother may return to the class.

The first nurse in room three should finish class about the time the physician arrives. She should go with the physician to assist with the examinations. After the patient has seen the physician she should return to dress in room two. The receptionist should see that the patient has an appointment for her next visit. The second nurse should check to be certain the physician's orders are written on the record and that they are clear to the patient. If a home visit is necessary for further instruction or demonstration, an appointment may be made by the nurse at this time.

#### Midwife Supervision

Under existing legal regulations the extent of midwife instruction

is limited. Generally speaking, when the midwife is active it is desirable that she should receive much the same type of information that is given to the maternity patient.

It is recommended that birth certificates and infant death records should be reviewed carefully at least every two years in order to compile a list of active midwives in the area. This may also be a means of evaluating the record of midwife activity and the number of live and stillborn infants she has delivered. Such a survey should indicate where the greatest need for supervision exists.

Each public health nurse should plan to visit regularly the active midwives who reside in her district. Supervisory visits may include those by the nurse to the midwife's home and visits of the midwife to the nurse's office. The midwife's bag, as well as the articles it contains, should be checked for cleanliness and usefulness. Medications should not be a part of the equipment. The midwife should understand that any type of medication is administered only upon specific order of a licensed physician. All patients of midwives should be examined by a physician to be sure the patient can be safely delivered by a midwife. All midwives should be encouraged to refer their patients to the maternity clinics for supervision where the service is available.

The nurse should endeavor to see that the midwife understands the principles of good hygiene, both in her own living, and in the instructions she gives to her patients. The nurse may give the midwife practical instructions in garment selection for both mother and infant, in setting up a home for safe delivery, and in the recognition of early signs of trouble so that a physician may be called in time to help the mother and baby.

The nurse may also assist the midwife to understand the importance of eye prophylaxis for the newborn infant, and of birth registration. She may also be able to stress important phases in the care of both mother and baby, including a well-balanced diet for the mother, safe perineal care, safe breast care with emphasis on supporting rather than binding the breasts, a simple method of bathing both mother and baby, and similar procedures.

The nurse should examine closely the superstitious practices of midwives before she attacks them. Such beliefs as putting an axe under the bed to "cut pain," and putting a bag of asafoetida on the baby to "drive away the evil spirits" are probably harmless to the individuals. Such practices as putting cobwebs or dirt-dobbers' nests, on an umbilical cord, and giving catnip tea to infants are harmful. Upon these latter practices the nurse should bend her efforts for re-education.

The Manual for Teaching Midwives published by the Children's Bureau in 1939 is still recognized as one of the best reference books for nurses giving midwife supervision. Using this book as a guide, nurses should be able to give simple demonstrations such as: Making supplies, making a delivery bed, hand-scrubbing, care of the baby's eyes, tying and dressing the cord, and bathing the baby. The midwife should be given ample opportunity to return these demonstrations to the nurse.

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## CHILD HEALTH SUPERVISION

Nursing care of children as part of a public health program is concerned with all the health and growth needs of each child from birth to adulthood.

### Objectives

1. To cooperate in improving and expanding services to all children, including the handicapped child, and the prematurely born infant, to the extent that each will enjoy maximum physical and mental health
2. To give nursing care designed to minimize physical and psychological hazards to growth and development in order that all children may reach adulthood with the fullest development of their individual capacities for living a satisfying life.

### Functions

1. To assist parents in developing an understanding of the health and growth needs of children and an insight into how these needs can be met by:

Creating confidence in their ability to provide a warm, wholesome atmosphere in which the child can thrive

Anticipating with parents the behavior of children based on an understanding of growth and development sequence

Directing parents in thinking through their objectives and methods of giving guidance

Creating a desire for the benefits derived from continuous health supervision, and by supplying information about how to secure such services

Pointing out preventative practices for protecting children from disease and from other traumatic experiences

Demonstrating nursing procedures in keeping with medical care plans and with the individual child's capabilities and personality

2. To cooperate with the family physician and dentist in the medical and dental care plans for individuals by interpreting facts that influence the provision of care and by clarifying features of care not readily comprehended by the family
3. To interpret the community strengths and weaknesses relating to total child care
4. To give assistance to any social, recreational, or educational agency or project that contributes to the quantity and quality of services available in the community
5. To share professional knowledge, experience, and observations with nursing colleagues so that service may continue to improve.

### Management of Service

Case finding. One of the most important sources of case finding is through the physician or pediatrician. The parents requesting this service of their private physician is one effective way of acquainting him with public health nursing services.

If there are midwives active in the community, every effort should be made to develop a prompt reporting system satisfactory to the midwife and the nurse. An attitude of mutual respect and helpfulness will overcome many difficulties encountered in working with midwives.

The antepartal case load is another source for case finding. A plan to visit the newborn infant may be made prior to his birth. This enables the nurse to give help at a time when there is the greatest danger to life.

The individual request for service from parents often represents the most valuable way of reaching those who are psychologically ready for the services of the public health nurse.

Referrals from the hospital staff, as well as from the private physician and clinic, should increase steadily as the role of the public health nurse is recognized, and as she demonstrates her ability to meet a need. The rapport established by the nurse as she works with the various community agencies should lay the ground work for the development of a reciprocal referral system.

Community agencies other than the hospitals will from time to time refer individual families for the services of the public health nurse. In sharing nursing knowledge and skill with other professional workers, the nurse has an opportunity to gain a better perspective, and a greater understanding of her problems, which should improve the quality of her services.

Case load. In determining case load, the number of nurses giving direct family health service, the nurse's experience and training in

public health and pediatric nursing, the services emphasized by the unit administrators, and the reasons for this emphasis should all be considered. The chief causes of morbidity and mortality in the various age and racial groups, the nature and the extent of services rendered by other agencies, the number of children not receiving medical care, and the reasons for this lack, likewise enter into case load determination.

The time required to give services to children of various age groups is another consideration. It is estimated that approximately one and one half hours are needed to give postpartum and newborn care in a home situation; that 30 to 40 minutes are needed to give service to an older infant in the home; and that a visit in behalf of a preschool child will require from 20 to 30 minutes. In addition, the amount of clinic service available enters into the case load planning. Clinics provide service to more children in a shorter period of time and decrease the number of home contacts necessary for developing good child care methods. However, it does not eliminate the need for all home visits.

Case selection and frequency of visits. The following suggestions for case selection are listed in the order of urgency for service.

Premature infants. These children should be considered for priority visiting whether being cared for in the home or preparatory to discharge from the hospital. They should have a daily visit until some family member understands their special needs, has secured the necessary equipment, and can give the appropriate care. A weekly visit until they weigh seven pounds and are progressing satisfactorily is indicated, and then they should be visited according to the plan for well children of the corresponding

age group.

Acutely ill children. A physician's request for a demonstration of some nursing procedure, should be considered as an emergency. Children with a communicable disease should take precedence over other sick children. A visit for the initial demonstration, a return visit the next day, and a visit to guide in terminal disinfection procedures should be the minimum planned.

Orthopedic or other handicapped children. Where favorable prognosis depends upon early medical and/or surgical attention, handicapped children should be scheduled for the earliest possible visit and seen as often as necessary until they are under care. Thereafter, visits should be spaced according to the plan for children of the same age group. Further consideration should be given to determining which of these children take priority over first-born and newborn infants. Children with anatomical malformations which interfere with life, those with acute osteomyelitis or poliomyelitis, or with severe burns, should be considered priority cases. Children with club foot deformity, congenital dislocated hip, torticollis, extra digits, etc., should be visited in accordance with the plan for other children in their age groups.

First-born - newborn infants. Those without medical supervision should be given priority for care. First-born infants should be seen before other newborn infants. The goal for scheduling visits to newborn infants whether with or without medical supervision should be to visit on the first, the third, and about the eighth day after birth, and then weekly until one month of age. After this period, the suggested schedule

of visits for children under one year of age might be followed. Any plan must be flexible to meet the individual situation.

Children under one year of age. These children comprise the fifth group selected for care. Those without medical supervision should be visited first. In the beginning, visits should be spaced frequently enough to deal with the felt needs; then ideally, they should be scheduled at monthly intervals for the first six months, and at two to three month intervals until one year.

Preschool children. The sixth group of children to be given service are those of preschool age referred by a physician or whose parents have requested nursing service. Visits to these children should be scheduled frequently enough to meet the individual needs, and then, where possible, spaced at four to six month intervals throughout the preschool years.

Preschool children without medical supervision. These children are the seventh group to be given preference. Visits should be spaced as suggested for the above group.

School children. Visits for health supervision of the school child, where no other service is rendered in the family, should be limited to those children who are referred by the physician, the classroom teacher, or the parents. In serving this group, the public health nurses may save time by inviting parents to join in a three way conference of teacher, parent, and nurse. Individual guidance at the school may eliminate the need for home service to the older child.

Termination of service. This should be based on the policies set up by the administrators of the program. No unit in Texas has enough nurses

to give total service in all public health activities. Local health problems should determine largely where nurses should give emphasis. Sometimes nurses wish to terminate service because they feel a family is not cooperative. If a philosophy of child care which recognizes the rights of parents to determine their own course of action for their children is accepted, and if nurses feel that most parents want to do what they consider best for their children, service will be terminated reluctantly. Instead, a careful study should be made of the methods used in approaching and motivating the family to action. Where it is at all practical, a nurse may transfer a family for service to another nurse whose approach might be different in a particular situation. It is often helpful to present baffling situations for staff discussion or to consult with other professional workers, such as teachers, child guidance workers, ministers, etc.

### Home Visiting

The home contact in behalf of the child lends itself to an effective parent education situation. Visits should be timed to the convenience of the family, and by appointment where possible. Distractions arising out of the activities of the young children are minimized, since in the home children are less likely to be hovering near their parents. The parents have greater freedom to discuss problems regarding their children. The nurse in turn can learn much from her observations of the individuals in their various activities. She can obtain a fairly complete picture of the home and the neighborhood.

Insofar as possible, every child given health supervision in a

clinic or conference should have at least one home visit. More visits are usually indicated, even when service is provided regularly through clinic facilities.

Content. Teaching opportunities in the care of the newborn and infant are unlimited and vary as greatly as the personalities and abilities of the people with whom the nurses work.

An observation and appraisal of the infant should be carried out upon the first contact whenever possible. During a skillful appraisal of the newborn child, she should be sensitive to all she sees, hears, and feels during the observation.

The nurse should secure as much information as possible about the infant and his family before she makes the appraisal. This information will help the nurse in evaluating her impressions, in reporting her findings to the physician in charge, in recording significant data for future reference, and in counseling the family regarding the infant's needs and their plan of care. She should be informed in regard to: The nationality of the parents, the social and economic history of the family, the type of home, the history of any abnormalities or diseases in the family, such as, anomalies, albinism, diabetes, muscular dystrophy, mental retardation, deaf mutism, syphilis, or tuberculosis.

The antepartal history of the mother is important. It should include: Nutritional status, the date medical supervision was begun, the frequency of visits to the physician, and the presence of communicable diseases, with particular reference to measles, syphilis, and tuberculosis.

The natal history should include: Whether labor was rapid or prolonged, the presence of infection, manual turning of the infant, and whether instruments were used. The immediate postnatal history of the child should contain information about his color, whether respiration was spontaneous, delayed, or elicited, if the cry was weak or of full volume, if he was irritable, active or placid, and about his sucking and swallowing ability.

A guide for the specific observations the nurse should make and, some other considerations in an appraisal of the newborn infant are presented.

Typical Picture

Reportable Deviations

Size of Child

The weight is about 7 pounds

Weight of 5 and one half pounds or less is characteristic of prematurity

Birth weight is regained in 10 to 14 days

Weight gain is slow and difficult

Height is 20 to 21 inches

Height of 18.5 inches or less is characteristic of prematurity

Temperature, Pulse, Respiration

The infant's temperature is slightly higher than the mother's immediately after birth. In a few hours the temperature drops  $1\frac{1}{2}^{\circ}$  to  $2^{\circ}$  and becomes stable

Elevated temperature

The heart rate is 80 to 160 per minute

Variation in the heart rate with activity will be particularly marked in prematurity and fibrillation is thought to play an important role in retarding the complete progress of the premature

The respiratory movement is mostly abdominal and there is little use of the intercostal muscles. The rate and volume vary considerably- 16 to 39

Marked changes in the rate of respiration particularly when combined with an increase or decrease in volume are significant

Shallow, irregular, poorly synchronized respiration is characteristic of the tiny premature infant

Symptoms of excessive mucous may be present. Apneic attacks, asphyxia, cyanosis, and snuffles may be associated with:

- prolapsed cord
- congenital syphilis
- premature separation of the placenta
- prolonged anoxemia
- excessive narcosis
- congenital cardiac malformation
- atelectasis

The first cry of the newborn is strong, with a good tone and is usually associated with the initial respiration. Soon the tone and volume become more subdued.

A shrill, feeble cry of short duration, a soundless cry, a cry not sustained, or difficult to elicit may be associated with difficulties of the following types:

- anoxia
- prematurity
- intracranial lesions
- syphilis
- narcosis

A crowing cry not accompanied by cyanosis or supersternal retraction is probable evidence of congenital laryngeal stridor, looseness, or redundancy of vocal cords. There is also a possibility of tetany or thyroid enlargement

Hiccoughing, sneezing, and yawning help to keep up the carbon dioxide and oxygen balance in the body and occur frequently. Coughing occurs rarely

### Reflex

The Moro-Reflex is present at birth even in prematurely born infants. This is a flexion of arms and legs with the arms forming an arc over the body and the legs assuming a frog-like position in response to a sudden movement or a loud noise

Failure to respond to this stimulation with the typical reflex movements should be noted

### Special Senses

Special senses present at birth include reaction to light. The tactile sense is most pronounced at birth, hence thermal and pain stimulation are keenly felt. The senses of taste and smell are also developed at birth. Infants vary in their response to auditory stimuli but after about 10 days this sense is well developed

### Color

The color is a deep rose or pink. In dark-skinned infants the soles, nails, and mucous membrane should be particularly observed for color

A livid red color may be associated with intracranial injury. Cyanosis may be associated with respiratory obstruction, circulation disturbances, or with chilling. Color changes may also be associated with aspiration of mucus, birth canal content, or milk. Jaundice may be associated with:

- severe anemia
- erythroblastosis
- septicemia
- congenital syphilis

A dark red or pinkish, waxy color may be characteristic of prematurity

### Eyes

### Head

## Skin and Mucous Membrane

The skin is moist, soft and elastic.  
The fat is well distributed

A dry, wrinkled skin covered with lanugo hair and lacking adipose tissue is associated with prematurity. A glazed, tightly drawn skin over the abdominal and chest areas is often seen in the prematurely born infant. Immaturely developed nails are often seen in the premature infant

Cutaneous eruption in the folds of the skin or the appearance of superficial blebs should be noted

The condition of the mouth is noted as the child cries or yawns. Tongue depressors are not used for this purpose

Small white flakes in the mouth, resembling milk flakes, may be indicative of thrush

## Sucking Ability

Sucking ability is well established at birth and the child needs to exercise it. Neuromotor control develops first over the mouth. The baby should be observed during the nursing period if possible. He should be placed on the bed beside the mother with his cheek against the mother's breast. He will root about and turn his head toward the nipple because he roots in the direction of touch. When the child takes hold of the nipple, the mother should be encouraged to cuddle him in her arms with his head a little higher than his body

Poor sucking and swallowing reflex may be associated with:

- prematurity
- immaturity
- intracranial lesions
- narcosis
- tongue-tied conditions (rarely)

Refusal to nurse may be associated with intracranial lesions, narcosis, prematurity, etc.

Vomiting may be associated with:  
swallowed mucous  
over-distention with air  
pyloric difficulties  
duodenal bands

Cleft deformity of the palate can usually be observed when the child cries

## Head

Occipitofrontal circumference in

relation to the body is one half the length of the body plus 3.9 inches. Measurements are approximately 13.7 inches. These measurements are not made by the nurse, but by the examining pediatrician

Molding and edema due to delivery pressure are frequently present at birth, but usually clear within a short time

The head is observed for edema, tension, and pressure. Tension and pressure are more significant than edema and are noted in the anterior fontanel most frequently and should be reported promptly

### Position of head

A predominant motor behavior in the first 16 weeks of life is the side preference called the tonic neck reflex. The left is usually the preferred side. When the infant cries the head assumes a midline position

Habitual flexion to one side with the chin rotating to the opposite side should be investigated by a physician. Torticollis, (shortening of the sternocleidomastoid muscle) may be present. The sternocleidomastoid muscle should be observed for lumps or hematomas

The head is flexible in all directions. The nurse can observe this in an active child without actually directing the head through the motions

A limited ability to make self adaptations is seen in the premature infant. If placed in a prone position he can slowly turn his head to a preferred side

Head control is acquired at about 3 months of age

### Facial muscles

Facile muscles should contract symmetrically when the baby cries or laughs

Injury to the nerve fiber from pressure over the facile nerve in utero or during delivery may be minor or severe depending on the degree of damage

### Eyes

The eyes react equally to light. Neuromotor control of the eyes develops later than mouth control. A transient strabismus of one or

Inequality of the pupils, or failure to close one eye as tightly as the other may be a symptom of intracranial lesion

both eyes may be present for a short time

Discharges or swelling of the eyes should also be reported. (Eye washes should not be used except upon the recommendation of a physician)

### Trunk

The clavicle is the first bone to ossify

Any calloused area along the shaft of the clavicle should be detected. A fracture of this bone may cause pressure or injury to the brachial nerve, which passes under the mid-third of the clavicle. Failure to elicit the Moro-Reflex may be due to a fractured clavicle

The rib cage is narrow in contrast to the abdomen

A rosary or beading of the ribs should be noted

Enlarged or lactating breasts may be associated with a transient placental hormone from the mother. Manipulation of the breast should be avoided. Usually no treatment is indicated

There may be distention of the abdomen

The cord is off and the umbilicus is clean and dry after about five to seven days. (Bands and dressing are usually removed as soon as the navel is clean and dry. Unless there are specific recommendations, cord dressing should consist of cleansing with alcohol and applying a dry sterile dressing which is not changed unless it becomes wet or soiled)

A discharging or red navel or cord should be noted

A herniated umbilical ring will bulge during crying and should be reported. (Strapping should be done only upon orders of a physician)

### Extremities

The newborn alternately flexes and extends his legs. This is the normal kicking motion. The intensity of movement in a wide-awake infant is influenced by his emotional equilibrium

The feet are freely movable in all directions

Full extension of the elbows, knees, and hips may be difficult in the newborn because of the normal intrauterine position

The fingers of the infant maintain a position of flexion for about 16 weeks, but no difficulty is encountered in extending all of the fingers

Feeble muscular activity may be characteristic of a premature infant

The range of foot motion in all directions may be the difference between a mild club foot and a normal foot. The most common type of club foot deformity is talipes equinovarus

If the infant is unable to move his arm away from the body, to elevate or outwardly rotate the upper arm, to flex or supinate his forearm, or if there is a palmar flexed hand in a claw-like position, injury to the brachial plexus should be suspected. (In this instance the extremity should be kept in a position of function until medical attention is secured. Early attention is indicated, because the position may become a fixed deformity if not treated early)

The site of injury will determine the muscles affected. There are three types: Erbs or upper arm paralysis; Klumke's or lower arm

paralysis; and the whole arm type

Webbing, clubbing, supernumerary digits, absence of parts, and over-lapping of digits are not infrequently observed congenital malformities

Prone  
(Face-lying position)

The newborn attempts to lift his head and shoulders with success for very short periods. He settles with his head and to the preferred side

The shoulder blades are equal in size and position

There are two spinal curves present which are convex posteriorly. They are in the dorsal and the sacral spine. As the muscles permit sitting and standing, the cervical and lumbar curves develop

In the prone position, the newborn usually lies with the buttocks high, the knees leaning toward flexion, and the feet turned out

There is more danger of the newborn falling when in the prone position because of the frequent movement of his shoulders, arms, and legs. Probably the greatest danger of prolonged periods of face-lying is in developing weakened ankle and foot muscles and poor foot position, because the weight rests on the toes and knees, the toes become contracted and the feet everted

Lumps or hematomas may be detected in this position in the sternocleidomastoid area and limitations of head motion may also be observed

Sprengel's deformity, present at birth, is an upward displacement of the scapula

An overgrowth of hair, in the dorsal and lumbar region, or a frank, protruding tumor may be symptoms of spina bifida

A dislocated hip is evidenced by the head of the femur slipping along the socket rather than rotating in the socket as the legs are flexed at the knee and hips. The following are also suggestive of this condition:

- pelvis with broad, flat-appearing buttocks
- widened perineum
- appearance of a short leg
- limitation in adduction and rotation of the leg
- asymmetrical, inguinal folds
- habitual, pronounced, outward rotation of both legs

### Genitalia

In the male child the scrotum varies in size and may contain a moderate amount of fluid due to birth trauma. The foreskin is usually adherent to the glans. (Forceful retraction should be avoided.) In the female the labia minora is small in proportion to the labia majora

Marked phimosis, difficulty in voiding, bleeding, or discharge should be noted

The anus is closed tightly and the surrounding mucous membrane is smooth

Fissures, abnormal skin conditions, and venous engorgement should be noted

A temporary venous engorgement may be associated with breech delivery

The observation and appraisal of the newborn infant should be done in a quiet, unassuming way so that parents will not become uneasy or frightened. A natural time is when the infant is completely undressed for weighing or bathing. The appraisal of the premature infant is made with due consideration for his special requirements. The complete appraisal may not be indicated until he has attained greater maturity.

The prompt reporting of signs and symptoms of deviations to the physician in charge will contribute to early medical diagnosis and care, and the child's early recovery.

In addition to the teaching opportunities afforded in the appraisal of the newborn infant or older child, there are many other components of child care which will come up for consideration. Some of these are presented.

Parent child relationships. Each child needs to be accepted as an individual with a personality, a temperament, and a way of doing and learning all his own. He needs to have a feeling of being loved and wanted. Each child should be given opportunities to learn: To respect objects, persons, and places; to subordinate his own drives to social customs, accepted times, and places; to get along in group life; to accept his sex role and channel sex impulses wisely in living; to accept authority without hostility or resentment; and to accept and carry out good health habits in daily living.

Parents and others can help the child in this learning process by:

Providing an interpretation of the conduct appropriate in a given situation

Being consistent in the help they offer the child in learning socially acceptable patterns of behavior

Decreasing fears, grief, anger, and pain which children experience in the growing process

Answering intelligently the child's questions on sex and procreation

Providing a situation where dependable family relationships, patience, and tolerance are present.

From the first, the nurse should encourage the mother to cuddle her infant, to rock him, to talk or sing quietly to him, and to enjoy caring

for him. This personalized care will lay the foundation for ever-widening and satisfying personal contacts. The infant will soon respond with smiles and cooing sounds.

Fears of spoiling the child may be dispelled with the knowledge that in the first few weeks of life the infant does not voluntarily make demands for attention except those that are associated with hunger, pain, or discomfort. The tactile sense is well developed at birth, and discomfort may be associated with a sense of displacement or loss of support. The warm, responsive mother soon learns to distinguish the infant's needs as expressed in crying and even to anticipate them before crying is begun.

Thumb sucking in early infancy is often presented as a problem by parents. Since the sucking reflex is present at birth, any object coming in contact with the mouth stimulates this reflex action, whether it be the thumb or any other part of the anatomy. In the early weeks of life the hand gets into the mouth quite by accident. Hand to mouth tendencies develop around the third month, and continue throughout the first year and a half of the child's life.

As hand to mouth tendencies develop, safe and suitable toys help the child to have experiences which are acceptable to most parents. In the latter months of the child's first year, as he learns to grasp with his index finger and thumb, parents need to be instructed to be extra cautious about leaving small, dangerous articles accessible to the child.

A play pen is helpful in providing safety as the child learns to creep or stand, and wants to be within vision range of his mother during

play periods. Greater space is needed as the child learns to use his big muscles to get about. If valuables, stoves, electrical outlets, etc., are out of reach, many of the "noes" can be left unsaid, with greater happiness and satisfaction for all concerned. Push and pull toys, steps for climbing, and blocks for building are very helpful for the child learning motor control.

Even in the first year of life the rudiments of counting are developed as the child picks up his objects one at a time. He also begins to explore size, weight, and shape by mouthing, handling, and banging objects; hence, he needs a few simple toys. A box, a spoon, a string of spools, a ball, and blocks are the type he enjoys. Play is work. It is a learning process, and parents should be encouraged to give opportunity for experimentation as the child's interest is manifested.

Distinguishing early between "toilet training" and "toilet learning" may prevent disappointment to parents. Many frustrations for both parent and child can be avoided if the parent understands the significance of regularity and ability to sit alone before beginning a "catching process." Learning toilet control depends on the development of nerve pathways from viscera to the brain and subsequent muscle control. Then too, the learning period will be a happier one if parents can be helped to anticipate failures and understand some of the reasons for them. Most authorities agree that children do not master "toilet learning" until somewhere between the second and fourth years of life.

In helping a child accept his sex role, it is important that parents truly accept the child as a boy or girl, pretty or ugly, outgoing or

retiring; and like him or her as he or she is. Early acceptance of sex differences and roles can be fostered naturally in family life. Family attitudes about modesty, sense of propriety in bathing and dressing, and toilet routines are a few of the natural family life situations that offer opportunity for sex information. The parent's acceptance of the role as either mother or father, the dignity and pride felt in each of these roles, and the feeling of real contribution each makes to the family and society should help the child to be proud of the role he will play.

Questions related to oral and other hygiene habits will be coming up as the nurse works with the preschool age child. The meaning of these activities, and why the child engages in them, should guide parents in determining the best ways to help the child acquire socially acceptable habits of hygiene. In his earliest attempts to carry out these desirable activities the child is concerned with experimentation. He next becomes interested in imitation and approval by his parents. Later, as contact with children of his own age increases, particularly in the early school years, he is interested in conforming to his peers. In adolescence he strives to be personally attractive to the opposite sex. Thus, the child is motivated by various means to conform to the standard of personal hygiene set up by his family and his play group.

As the child approaches school age and school readiness is uppermost in the mind of parents, the nurse should give guidance with consideration for: The physical stamina of the child; his toilet independence; his ability to leave the mother and the home willingly for the required number of hours; his ability to cooperate with another

authority; his ability to manage clothing, etc.; his ability to share attention with other children; his acceptance of the idea of going to school; the child's immunity or susceptibility to the childhood diseases; his ability to sit and attend to an idea for short periods; his ability to take a place as a participator in a group; and his ability to understand and speak the language of the school\*.

Another phase of the nurse's work with parents is the care of the sick child. Important considerations are: Ways of carrying out the physician's orders; how to meet the total needs of the child; and household adjustments in relation to giving necessary care without neglect of the other members of the family.

In order to help the child who must be hospitalized or subjected to strange, fearful situations of any kind, the parent needs to be informed about the treatment procedures, and what may happen throughout the day in the child's hospital environment. This should help the parents to be truthful with their child, to avoid promises which cannot be carried out, and enable them to plan the best way to help the child through this experience.

Methods of preventing infection. Handwashing, feeding technics, control of flies, the isolation of ill persons from well persons, and immunization procedures, are important considerations in preventing infection in young children. The nutritional status of a child will also

\* Winifred Rand, Mary Sweeney, and Lee Vincent, Growth and Development of the Young Child. 4th ed. Philadelphia, Pa., W. B. Saunders Co., 1947. pp. 11-15.

influence his ability to throw off pathogenic organisms and maintain a healthful state of being.

Hands that have come in contact with body wastes of any kind, with objects that have been previously exposed to insects, or with dust are potentially dangerous in giving child care, particularly to the infant. Therefore, before any care is given the child, the hands should be washed carefully with soap and water.

Feeding technic as a consideration in preventing infection has to do not only with safety in the care of the formula, but also with preparation, storage, and protection of all other foods taken by the child. (Section on Oil Can Technic.)

Fly control in homes not properly screened can be carried out by improvised methods until the infant is about four months of age. Prior to the time the child begins to get about by crawling, standing, and sitting, a screened cover for the crib can be used effectively. A large wooden frame, with mosquito netting secured on all sides to the frame, can become a portable device for any kind of crib, bed, or bassinet area. If the frame is high enough to permit the infant to stand and wide enough to permit crawling it can be used over a longer period of time. If the opening for this frame is by means of the topside folding back to lie parallel to one of the sides, as it is opened, safety is insured. This also enables the mother to give care with maximum ease.

Persons showing signs of illness should avoid contact with children. The younger the child, the greater danger there is in exposure to pathogenic organisms.

Immunization against whooping cough, diphtheria, tetanus, and smallpox, should be encouraged and completed in the first year of life if possible. Other immunizations may be recommended by the physician. The order and timing as well as the dosage will be prescribed by the physician.

Medical, dental, and nursing supervision. Parents should be encouraged to provide medical and nursing supervision for their child. In pointing up the advantages, the nurse could be most helpful by developing an appreciation for what is meant by total health needs and the inter-dependence of physical, social, mental, and emotional well-being of the child. This well-being is demonstrated in the child's behavior in eating, sleeping, playing, reaction to other individuals, resistance to disease and infection, achievement of motor control, acquisition of various social and emotional adjustments, and in all of his behavior.

As a child is becoming socialized and is learning to take his place in the family and the community, both parents and child make behavior compromises in keeping with the child's ability and age, and the family ideals. These compromises, therefore, are of interest to the professional persons who give health supervision. With a knowledge of growth and development, and a study of the individual child, the professional workers have an opportunity to give support, or to point up alternative courses of action in child care.

Parents who are aware that they are receiving this kind of assistance from professional people will realize the importance of supply-

ing a reliable history. They will not be inclined to seek service only for illness, for immunizations, or for formula changes. They will probably assume more responsibility for securing such service either through private or public resources. Thus some of the illnesses in children should be prevented, and non-preventable illnesses should be given more prompt and continuous medical supervision.

If continuous health supervision is provided, children are more likely to develop desirable attitudes about medical care, and about their relationships with physicians and nurses. Dental care should be considered an essential feature of health supervision. It should be started as indicated; somewhere between two and three years is the period usually recommended, because the twenty deciduous teeth have erupted by this time.

Nutrition. In improving an individual's nutritional status, consideration should be given to the requirements to be met; the suitability of the preparation for the child's digestion and developmental stage; the safety of the method of preparation; the conservation of nutrients; and the psychological components in the method of feeding.

The physician determines the requirements as he prescribes the formula, the vitamin supplements, and the addition of new foods to the diet. Breast milk is thought to be adequate for the infant's total requirements in the first few months, except for Vitamin D, if the mother is adequately fed. The nurse should encourage breast feeding of the infant, but she should refrain from creating guilt feelings

where parents are not willing to accept this method of feeding, or are unable to do so.

When artificial milk preparations have been ordered for an infant's formula, the oil can method of preparation has been used successfully and satisfactorily by parents. The economy of time, the adaptability to travel situations, the relative safety of the method in the absence of refrigeration, as well as the simplicity of preparation, are the chief advantages. When the physician in charge approves of the method it is suggested that it be demonstrated to parents.

According to the National Research Council, the infant who is artificially fed can maintain body weight and a satisfactory rate of growth with a formula containing approximately 50 calories per day per pound of body weight. During the period of infancy the caloric requirements are greater in proportion to size and weight, because the growth rate is greater than at any other period of life. In the one to three year period approximately 44 calories per pound of body weight have been recommended.

Adolescent boys and girls consume larger amounts of food as this is also a period of rapid growth. Requirements fluctuate with growth spurts and with individual children.

Vitamin D supplements are recommended by the National Research Council in amounts of 400 International Units daily. This amount is ample for good calcium retention in children where the milk intake is appropriate. Phosphorus and calcium are not utilized unless Vitamin D

is also present. The majority of older children require Vitamin D supplements. The adolescent child is thought to require as much as the infant. Sun bathing as a supplementary source of Vitamin D for the infant as well as the older child should be discussed with the parents.

Orange juice or other sources of Vitamin C are usually prescribed early to provide sufficient amounts in the first year, since cow's milk is usually not considered an adequate source of this vitamin. Mother's milk is adequate in Vitamin C only insofar as her nutrition is adequate. The approximate requirement for good nutrition is 30 milligrams of Vitamin C daily. Three and a half ounces of fresh orange juice contain approximately 50 milligrams. Consideration should be given to other possible sources of this vitamin as indicated, with particular children or in individual family situations. If carefully selected foods from each of the Basic Seven food groups are regularly provided, Vitamin C as well as the other vitamin requirements will be met for the older child.

The psychological components in feeding are many and varied. Oral activity, in the form of sucking both for nourishment and pleasure, is an important consideration in adopting a feeding regime suitable to the infant's growth and development needs. Voluntary control develops first over the mouth area; sucking interest and hand to mouth tendencies continue throughout the first year of life. Children should be allowed experience in perfecting this control and satisfying the need to mouth

and suck so that they will be ready to give up this interest for new, more mature interests.

The regulation of the flow of milk through the nipple should be studied in order to provide the most suitable sucking experience for the individual child. For the child who sucks vigorously, a small nipple hole might be more satisfactory; for the infant who tires quickly from sucking, the nipple hole should be large enough for the fluid to drop readily. The length of the nursing period should be considered too, if there is an indication that the child needs to suck for longer periods.

In the period when the child is learning to use his hands and fingers effectively, some practice should be provided in the use of eating tools. At one year the child's ability to use the finger and thumb in apposition is usually developed; his hand is beginning to take the direction of the course his arm will take. This ability should be exercised, and self-feeding experiences provided; parents should expect the child to finger food, to spill, and to enjoy his feeling experiences with food. Parents should also expect to give considerable assistance in eating for several months because the child needs to learn and develop sense perception in texture, weight, size, etc.

Later, in the preschool years, as the child has developed an ability to feed himself with a minimum of spilling, and if the family mealtime is scheduled at a suitable hour, it may be advantageous for the child to join the family group for his meals. The following advantages and disadvantages should be considered. The parents' table

manners influence the child's acquisition of socially acceptable eating habits. Bickering, nagging, or discussion of home problems are apt to build up tensions in the child, which may result in unfavorable appetites or digestive processes. Discussion of food likes and dislikes are apt to influence the child's selection of food. The family menu will include some foods which are unsuitable for the child, and even small amounts should not be given. The amusing eating behavior of the young child or his occasional spilling should not be made the occasion for family enjoyment, or comment. The length of time the family takes to eat in comparison with the time the child takes, and the time he can be expected to sit still, is a consideration; as well as how to compensate when it is better for the child to eat at an earlier time.

A preschool child given opportunity to eat suitably selected and prepared foods from the family menu will usually choose in keeping with his own needs, if he is offered these foods in an atmosphere free from anxiety and pressure to eat. Appetites which fluctuate with growth spurts, with activity, and with illness, are often perplexing to parents and may be handled in such a way as to set the stage for poor parent-child relationships and for poor eating habits.

Clothing. Some principles to keep in mind when clothing is selected are: To minimize the need for frequent changing; to promote ease in dressing; to avoid an over-the-head procedure for the young child; to give warmth without weight during the cold months, and skin protection without warmth in the hot months; and to allow freedom of activity.

With the preschool and the school age child, the nurse should increase the scope of her observations and teachings to include helping parents see how the child assumes increasing responsibility in regard to clothing. First, the child as a toddler, only assists with his dressing. Clothing is then designed to aid in self-help with some simple means of front identification, and easily manipulated fastening devices. Allowing the child time to assist in his dressing is necessary at this stage.

The earliest decision the child is able to make may be to choose from a few colors the one he wishes to wear today. Later he may participate in the selection of patterns and designs, from limited choices. If the child is given increasing responsibility as he develops competence in earlier years, by adolescence he should be able to select suitable clothing, in keeping with his personality, and the family budget. The adolescent's decision is influenced by family likes and dislikes and by styles popular among his peers.

"Suggestions For Infant Clothing, N-8694," a leaflet published by the Texas State Department of Health, outlines some points about specific garments for infants which may be useful to the nurse in her work with parents.

Shoe and stocking requirements for meeting foot growth and budget needs are also factors the nurse may need to discuss in working with children and their families. Requirements are set forth in the Texas State Department of Health leaflets, "Shoes and Stockings for Growing Feet, PT-84," and "Teen Age Shoes, PT-85."

## Special Needs of the Premature Infant

The premature infant clings closely to the sequences of maturation, because his rate and pattern of development is changed very little by birth. It is therefore obligatory that substitute arrangements for the essentials of temperature, humidity, oxygen, and nutrition be fulfilled, if he is to survive. Protection from infection is equally necessary, because birth occurs before the antibodies of the mother have been transferred to the child.

The public health nurse should be able to provide these essentials through actual care, or supervision of care in the home, or referral to a hospital equipped and prepared to meet his needs.

Before birth, equipment to establish respiration and control temperature should be assembled. There should be a rubber bulb or ear syringe to aspirate mucus, and a warm blanket and heated bed or box (80° to 90°F) to receive the infant. Every incubator or heated bed should be equipped with a thermometer. In the home, warm stove lids, bricks, salt, etc., well wrapped, may be used around and under the sides of the box to maintain a constant temperature.

A separate room is preferred as an aid in preventing infection. The temperature and humidity of the room should be controlled day and night. The temperature should not vary more than five degrees, that is, not below 75° or above 80°F. The moisture in the atmosphere prevents undue loss of water through the skin and respiratory tract.

Individual clothing and equipment is necessary. Where no incubator is available, and improvised equipment is used, clothing of

cotton flannel or wool is recommended. A blind sleeved, close fitting jacket of flannel and a soft diaper are the minimum. All clothing should be lightweight, warm, soft, and smooth. Clothing should be constructed to permit free movement and yet close fitting enough to provide snugness. The diaper may be a cotton square pad which can easily be replaced without overly disturbing the infant. Sleeves should be long enough to cover the hands, and gowns should cover the feet.

One of the most important factors in the care of the premature infant is feeding. The development and condition must be thoroughly understood and applied on an individual basis before the method, type, and interval is selected. For psychological and physiological reasons, the nurse should be sure the family understands that the infant has a limited ability to suck and swallow, that he has a limited stomach capacity, and that he tolerates certain foods only. She can help the parents understand the infant's demands for feeding and how to meet them. They should be carefully instructed to elevate and support his head and shoulders throughout each feeding; and the bottle, when used, should also be held throughout the entire feeding. They should avoid tiring the infant by too long or manipulated efforts to feed him. Each nipple should be examined in reference to the flow of milk. The rate of feeding should be carefully observed.

Separate feeding equipment must be adjusted to the individual infant's needs. A medicine dropper having tip protected with rubber

tubing, a medicine glass, and a small nursing bottle with suitable nipples are minimal. Care and preparation of feeding should follow the procedures discussed in Oil Can Technic.

There are special nursing measures which must be fulfilled if energy is to be conserved and infection prevented. The nurse, or person giving care, should wash her hands with soap and running water before handling the infant, before feeding, and after diapering him. She should wear a clean gown or apron to give care. She should instruct the family and visitors to stay away from the infant if they have respiratory, skin, or diarrheal infections. All children should be excluded. She should protect the bed, when necessary, with mosquito netting. The bed, equipment, and room should be kept clean with soap and water. Dry dusting of floors and equipment should not be permitted.

Baths should not be given during the first 24 hours of life, or until the infant's condition warrants it; preferably not during the first ten days. The buttocks should be cleansed with soap and water or mineral oil when necessary. The temperature should be taken by axilla. The initial weighing of the infant is postponed until his condition warrants it. He should be weighed twice a week thereafter.

The infant should be handled as gently as possible. He should be well supported when lifted. He should not be grasped by the chest. The thoracic cage is fragile and small, and the supporting tissues so soft that real damage can be done from manipulation. Harsh grasping of the chest may also result in regurgitation of food.

The functional immaturity, the inability of most prematures to nurse at breast, the high susceptibility to infection, and the lack of normal contacts are valid reasons for anxiety and often result in parents feeling insecure in giving care to their infant. The infant, too, suffers from his rigid isolation and the separation from his mother. The nurse should make every effort to give moral support to the parents. She may encourage the mother to maintain her breast supply and to hold and breast feed her baby as soon as his condition permits. She may show him to his parents and point out his progress in growth and development.

### Well Child Conference

Objectives. The objectives of a well child conference are: To stimulate the provision of continuous health supervision for all infants and preschool children and to participate in providing it for the designated group; to create a better understanding of the child's total needs; and to promote mental health for parents and their children.

Function. The nurse shares in the responsibility for determining the need for a child health conference. This need can be determined by studying the following facts in a given situation: The number of children who are not being given health supervision; the reasons for children having no care, including facts about the availability of physicians; and the financial resources of the families under consideration.

Once the need has been demonstrated, the nurse participates in

securing a sponsoring group, since she has an opportunity to know the organizations in the community and their projects. In stimulating interest, the nurse should be able to inform the prospective sponsors of the objectives of such a service, and to explain how the well child conference functions. She should also be able to present a clear picture of the assistance requested from the sponsoring group. This assistance may include explaining the service to the community, or enlisting the interest of physicians to participate in the project. It usually involves assisting with routines during clinic sessions and occasionally providing demonstration equipment.

One nurse cannot carry out all her responsibilities in a well child conference without the assistance of a volunteer, subsidiary worker, or another nurse.

The nurse should make a home visit to all those being served by the well child conference prior to the first clinic appointment. In this visit the nurse has an opportunity to discuss the kind of service parents may expect from the conference. She should obtain an accurate history of the child, giving guidance to the parents about how they participate as interpreters of the child's behavior in the parent-physician discussion in the well child conference.

During the clinic sessions the nurse should be responsible for taking and recording an interval history on all children to be served. The initial history, along with the interval histories, should provide accurate and pertinent information regarding signs and symptoms of ill-

ness, diet and eating habits, sleep and rest routines, motor activity, play interests, social responses, and other significant behavior. The nurse should learn what concerns the parents most at this time, and how they have responded to past instructions.

The nurse should plan for a series of demonstrations and lessons based on the interest of the parents attending the clinic. If records have been well written, interests common to the parents should stand out in them. The lessons need to be revised and enriched from time to time.

During each clinic session the nurse should present one of the lessons from the series. The usual time devoted to group teaching is fifteen or twenty minutes. The teaching should be done before parents and their children have grown weary of waiting. Sessions can usually be planned to follow registration and preparation for examination, and prior to the physician's arrival. However, this may not be possible unless two nurses function in the clinic. The organization of the clinic, including the appointment system, the prompt arrival of patients and physicians, the flow of patients from one service to another, and the play activity of children, will all influence the success of the group teaching. The topics which follow are suggestions for specific lessons.

Crying, and expression of need in the newborn child

Formula preparation (a demonstration)

Preparation of cereal or other baby foods (a demonstration)

How a child learns bowel and bladder control

Clothing that helps a child grow in self-sufficiency

Improvised equipment which helps a child develop habits of order (or cleanliness)

The meaning of appetite fluctuations

Home safety for run-about children

School readiness

Helping a child through a convalescence (a demonstration of various toys, treasure boxes, etc., to stimulate interest and promote self-entertainment).

The nurse is expected to plan for assistance to the physician. She may find it helpful to be present when the physician makes the examination, depending upon how clearly the physician records his recommendations. It may be necessary for her to assist the physician if a subsidiary helper is not available.

Following the examination and the patient-physician conference the nurse should have a final interpretative interview with the parent. During this discussion she should explain and demonstrate, where possible, any procedure involved in carrying out the physician's recommendations. It may be necessary to make an appointment for a home visit. She may emphasize points of discussion in the parent-physician interview by giving literature with special reference to the points under consideration. The clinician and the nurse should have discussed and agreed upon the most pertinent leaflet materials to be used. The nurse should then record all pertinent facts of this interview, be sure the next appointment has been given, and see that it is recorded in the proper places.

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## THE SCHOOL AGE CHILD

The health program for the school age child is a phase of the generalized public health program. The well-being of the child, and his education for healthful living should be kept in mind when planning and carrying through the program. This includes his parents and school authorities who help to provide a favorable environment and a health service adequate to promote health.

### Objectives

1. To assist in securing maximum health for every school child through his own intelligent cooperation and that of all others who influence his environment
2. To help those who care for, guide, and teach children to consider the child as an individual, as a member of a family, as a member of a community, as well as a member of a school group.

### Functions

1. To assist the school administration and medical authorities with plans for the total health program of the school group
2. To cooperate in the in-service training of appropriate personnel through demonstrations, and by other means be of assistance to teachers in the acquirement of technics and information necessary for observing the health status of children, such as, testing of visual and hearing acuity and weighing and measuring
3. To conduct individual and group conferences with parents and school personnel concerning children's health and measures for

preventing disease and promoting health

4. To assist in outlining and promoting education programs by sharing with teachers and parents the current scientific understanding of growth and development of children, and how to recognize significant departures from normal. Pertinent factors regarding anatomical and physiological function of the human body relating to preparation for parenthood should not be overlooked
5. To work with personnel from other agencies concerned with the child or family, to guide the parents in following through with remedial measures recommended, and in making necessary home adjustments to improve conditions which may influence the development of the child
6. To acquaint parents with school policies and programs, which affect children's needs; to acquaint the appropriate school personnel with health problems encountered in homes, and to help both parents and school personnel understand and make use of available community resources
7. To assist with the guidance of parents and school personnel in the prevention and control of the spread of communicable diseases
8. To promote the recording on cumulative health records of all immunizations, teacher observations, and other pertinent data, and to encourage utilization of this information to the best possible advantage
9. To be familiar with standards for safe, healthful, and attractive school environment and to give practical help and suggestions

in an effort to reach and maintain these standards

10. To encourage and promote periodic physical examination by the family physician for all school personnel and pupils. The responsibility for these examinations should be assumed by the individual or the individual family when possible. Mass examinations are to be distinctly discouraged
11. To help the school personnel plan for locations, equipment, and responsible persons for first-aid administration
12. To assist with a plan for action in case of sudden illness or accident to students, faculty, or other personnel. (Plan for isolation of patient when necessary.)

#### Management of Service

Case finding. The public health nurse in her regular home visits to the family will find school age children who need health supervision. Referrals usually comes from school personnel who are familiar with and are putting into use the daily observation as explained in the State Department of Health Bulletin, No. 8468. Crippled children's and other diagnostic clinics afford sources of case finding.

Case selection. The quality of the service rendered should be considered rather than the quantity. This would entail adequate preparation for school and home visits by the nurse, and careful selection of the children needing attention. Cases should be selected on the basis of physical, emotional, or social needs where the nurse feels she is competent to work with parents. Routine visits should not be made to check on absenteeism.

Frequency of visits. The number and frequency of visits in behalf of a child should depend upon the individual child's needs. These needs may be brought to the public health nurses attention through: Conferences with teachers; study of absentee records of pupils; information recorded on cumulative health records; conferences with parents in the home and school; and observation of home conditions and family relationships.

Terminations of visits. Continuous health supervision for the school age child is important and should be done by parents and teachers who are in daily contact with the child. Service from the public health nurse to the particular child should be continued as long as there is an indication of health needs.

### Home Visiting

Adequate plans for the individual child cannot be made without consultation with parents and consideration of his home environment. A very important part of the nurse's program is home visiting. Parents are responsible for the care of their child, but the nurse may help them to be aware of the child's needs and suggest ways of meeting these needs.

Content. The same general principles for making all home visits apply to home visits for the school age child.

In preparing for the conference or visit with the parent, the nurse should secure all the information possible about the particular child and other members of the family.

Before the visit is made, the nurse should, if possible, become familiar with: The child's health record; the attendance record; the reason for frequent or long absence from school; the teacher's observation

of the child's appearance, behavior, attitude, class work, and symptoms of deviations from normal appearance, which may indicate the need for special health supervision or medical attention.

If the child has been examined by the school or private physician, the nurse should consult him regarding his diagnosis, orders, and wishes concerning care. The nurse's position with the family may be strengthened if she can say that she has talked to the physician and teacher about the child's apparent problems and needs.

During the visit the nurse should try to learn what the parents know and feel about the child's needs, and the plans they have made or could make to help meet them. She should observe the environment and inquire about the health conditions of all other members of the family.

She should find an opportunity to explain the school health program for the child, thus coordinating efforts between the home and the school in behalf of the child.

The nurse should report to the teacher any home conditions which may affect the child's work or which indicate the need for special health education work in the class room. She should help the teacher make plans for individual student needs such as rest, (cots, as well as gymnasium equipment, may be needed) special seating arrangements, etc.

Teaching aids. The nurse should be able to help school personnel plan and carry through a good health program by the use of demonstrations and visual aids, and by individual and group conferences.

She should be able to discuss with, and demonstrate to, the appropriate school personnel ways they can assist with:

The control of communicable and non-communicable diseases, by

recognizing early symptoms of illness; by carrying out approved isolation measures; and by promoting approved immunizations and physical examinations for both pupils and school personnel by their own family physician. (The Daily Observation Bulletin, No. 8468)

The promotion of remedial action for the correction of defects

The approved methods of testing of visual and hearing acuity, and weighing and measuring children

The plans and procedure necessary to provide an adequate first-aid program, which includes a central location for the first-aid room, additional stations, equipment, and a person or persons responsible for administering first-aid

The promotion of good nutrition through the school cafeteria and the supervision of lunches eaten at school

The promotion of safe, healthful, and attractive school environment, which involves the right kind of seating, heating, lighting, and sanitation.

### Recording

The fundamental principles of record-keeping for the school age child are the same as for other age groups served by the public health nurse.

Two records are recommended, the nursing record and the cumulative growth and health record. The public health nurse keeps a record on each child carried and these are filed in the health unit office. The other, the cumulative growth and health record, including immunization, etc. for each school child, should be kept by the appropriate school personnel and filed in the school until such time as the child transfers

to another school or graduates. If the child transfers, a copy of his cumulative health record should accompany him to the school he is entering.

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## ORTHOPEDIC

Orthopedic nursing as a part of the generalized public health program includes the prevention of orthopedic defects, the restoration of normal function, insofar as this is possible, and rehabilitation of the individual.

### Objectives

1. To develop an understanding of what constitutes orthopedic and plastic defects, and of the public health and social significance of such conditions
2. To assist in the prevention, early recognition, treatment, rehabilitation, and adjustment to orthopedic and plastic conditions.

### Functions

1. To teach individuals and groups the importance of good body mechanics and its relationship to general health and the prevention of defects
2. To instruct regarding the prevention and care of infections, trauma, and metabolic disturbances that may result in an orthopedic handicap
3. To reemphasize the necessity of an adequate diet, for the prevention of deficiency diseases and the promotion of optimal health, particularly for expectant mothers and children
4. To assist in the early recognition of orthopedic conditions and to effect a plan with the family for medical supervision

5. To demonstrate, give, or arrange for good nursing care under medical supervision; this may include assistance with hospitalization plans
6. To supplement the physician's instructions and to interpret his orders to patients and their families regarding orthopedic care
7. To cooperate with all community agencies in rehabilitating the patient
8. To promote community understanding, interest, and action in developing facilities for the conservation of health, and the prevention and control of crippling conditions.

#### General Information

An orthopedic patient is defined as one who has a loss of motor function from a congenital, acquired, or developmental condition.

The work of the Crippled Children's Division, Texas State Department of Health, is authorized by Legislative Act, House Bill No. 754. This act defines a crippled child as any person of normal mentality, under twenty-one years of age, whose physical functions or movements are impaired by reason of a joint, bone, or muscle defect or deformity, to the extent that the child is, or may be expected to be, totally or partially incapacitated for education or remunerative occupation.

To be eligible for rehabilitation service under this act, the individual must have a type of disability which can be expected to improve through medical or surgical care, hospitalization, artificial appliances, or a combination of these services.

The county judge, in the area where the child resides, must certify to the eligibility of the family to receive financial assistance for this care. Provision may be made for part payment. The guardian or parents must be legal residents of Texas.

The county judge also certifies that at least one physician, regularly practicing under the law of the State of Texas has examined the child and recommended said child as coming under the provisions of the act.

Orthopedic conditions may be classified as due to the following causes:

Congenital or hereditary, including absence of a part or extra digits, spina bifida, cleft palate, hare lip, etc.

Infections, such as tuberculosis, osteomyelitis, or poliomyelitis

Traumatic, including birth injuries, accidents, etc.

Metabolic, including new growths, etc.

Nutritional, such as rickets

Uncertain, including muscular dystrophies, flat feet, etc.

### Management of Service

Case finding. Early case finding is important. In all phases of a generalized family health service, the nurse should be constantly on the alert for symptoms which suggest orthopedic disabilities. She should make every effort to secure medical examination and treatment by referral of patients to a private physician or crippled children's clinic. She may utilize the facilities of the Crippled Children's Division in this respect. Referrals may come through school teachers and administrators, social and welfare agencies, ministers, relatives, neighbors, the school census, information on birth certificates, etc. Publicity through newspapers, the radio,

talks to groups, etc., often results in the reporting of patients.

Case selection. The nurse should make her selection of cases on the basis of the needs of the patient and family.

Case load. The nurse should carry for service those families particularly who need interpretation of diagnoses or physician's orders, in an effort to encourage sustained medical care.

Frequency of visits. The number and frequency of visits should depend upon the family's ability to understand the doctor's and nurse's instructions regarding care of the patient. It is desirable that all crippled children be seen at least once a year as long as service is provided through the facilities of the State Department of Health.

Termination of service. It is essential to have continuing medical and nursing supervision and skilled treatment to restore the orthopedic patient, as nearly as possible, to normal health; therefore, the nurse should close cases only when the patient no longer needs medical or nursing care.

### Home Visiting

The nurse should apply to orthopedic home visits the principles for home visiting as set forth in the section on child health supervision. She should inspect the orthopedic appliances to make sure that the patient wears them correctly, cares for them properly, and repairs or replaces them as the need arises. She should observe the posture and gait of the patient and report her findings to the attending physician. She should ascertain whether necessary treatments are carried out correctly and regularly, and if appointments for medical care are kept. The nurse can

often assist in planning for the patient's transportation to the physician's office, hospital, or clinic. She may also participate in making plans for convalescent care, education, and rehabilitation. In each instance, social, emotional, and economic consideration enter into any planning the nurse does with the patient and family.

### Crippled Children's Clinic

Minimum services necessary for a good clinic include those of:

Registrar (volunteer aide or clerk)

Receptionist (volunteer)

Usher (at least one) to accompany patients and to convey records to the various workers.

Typist (one for each 18 children expected)

Play supervisors (minimum of two if there is a wide range in the ages of the children attending)

Dressing room attendants (one volunteer for each dressing room)

Physician's attendant (a nurse or carefully selected aide, capable of performing this task, for each physician doing examination)

Physicians (sufficient number to allow for a minimum of ten minutes for each child expected)

Custodian

If the clinic is small, one person may provide services in two or more of the above listed categories.

## CRIPPLED CHILDREN'S CLINIC

### DUTIES

#### Registrar

1. Greets patient and family
2. Records names of patients in registration book, numbering them in the order of their arrival
3. Pulls records from the file box and attaches to the number corresponding to that in the registration book
4. Attaches a Clinic Record, a Social History, and a Child Health Record Form together for the patient, if there are no records for him

### ROOMS

Anteroom or reception set-up where patients enter building

### EQUIPMENT

Table and 2 chairs  
Child Health Record Forms  
Clinic Record Forms  
Social History Forms  
Registration book  
Pen, ink, blotter  
File box with records of known patients  
Waste basket

#### Receptionist

1. Takes records from the registrar and escorts patient to typist, where clinic records are filled in and identifying data on the Child Health Record and Social History Forms are completed if no records have been made previously
2. Takes completed records, directs the parent and child to the nurse assigned to interviewing. (The nurse at this time secures the original or the interval history as indicated.)
3. Directs the child to the play room according to the wishes of the nurse, and introduces her to the play supervisor
4. Collects records after the parent-patient-nurse conference is completed, and takes them to the usher

Large waiting room, well ventilated and lighted; heated as indicated

Desk and chair near entrance for receptionist, sufficient number of chairs for patients expected

DUTIES

ROOMS

EQUIPMENT

Typist

1. Fills in Clinic Record Form
2. Fills in Social History Form
3. Fills in identifying data on Child Health Record Form

Space set aside for typists

Writing materials, typewriter, table, and chair for each typist  
(Allow typist ten minutes per patient)

Usher

Before examination

1. Assists receptionist with hostess duties
2. Collects records of patients from receptionists after the nurse has completed patient's history. Keeps order of patient's arrival by attaching numbers
3. Notifies play room supervisor some ten minutes prior to the time that a child's play is to be interrupted
4. Escorts child to dressing room where dressing room supervisor is introduced

Station in reception room

After examination

5. Escorts child and parent who have seen physicians back to the interviewer. Child is now dressed in his own clothing
6. Secures records and accompanies child to the nurse or the physical therapist prior to the child's dressing, if the orthopedist has ordered exercises
7. Directs guest to other workers according to the nurse's recommendations following the interpretive interview
8. Collects records as work is completed. Takes records

DUTIES

ROOMS

EQUIPMENT

to registrar who files them  
alphabetically

Play Supervisor

1. Plans with the public  
health nurse prior to the  
clinic session, the follow-  
ing:

- To select equipment and  
toys for this clinic
- To review appointments  
given to determine age  
groups expected
- To group children whose  
interests are compatible
- To prepare activities that  
do not require long periods  
of time, and that can be  
interrupted, such as, clay  
making, simple toy making,  
finger painting, house-  
keeping

2. Introduces child to other  
children. Allows parent to  
remain with the child if he  
is unable to stay alone or  
reluctant to do so.

3. Provides opportunities for  
group play, individual play,  
or for observation of others

4. Determines when the indi-  
vidual child is to be called  
for examination in order to  
give the child advance notice  
that his play will be inter-  
rupted

Dressing Room Attendant

Before examination

1. Assigns place for each  
child's clothing

Space for play in  
or adjoining wait-  
ing room

Selected toys, equip-  
ment, and furniture  
indicated for the type  
of play opportunities  
provided

2 dressing rooms  
set up near the

Coat hangers on  
clothesline

## DUTIES

2. Allows adequate time for dressing and undressing and encourages children to help themselves. Gives help if necessary
3. Escorts patient and parents to the examining room, introduces them to the physician's assistant and gives the complete set of records to the worker

### After examination

4. Collects records, learns whether or not the child is to be seen by the physical therapist
5. Supervises dressing of child, if he is not to see physical therapist
6. Turns all records over to the usher after the child is dressed, and indicates child is ready to see next person
7. Points out toilet facilities as indicated

### Physician's Assistant

1. Sets up for examination
2. Keeps room and equipment in readiness
3. Collects records for patient being seen
4. Introduces patient and parent to orthopedist
5. Provides opportunity for parent or patient to talk to orthopedist
6. Makes sure orthopedist's examination and recommendations are recorded. Usually the orthopedists will do this if the set-up is convenient

## ROOMS

examining room to promote privacy for patients. Possibly there should be 4 rooms, if colored children are expected. These rooms may be improvised, if necessary

Toilet facilities for children and parents

Examining rooms, large room may be screened into several private examining spaces. Number depends on number of orthopedists and pediatricians scheduled to examine patients

Reasonable quietness desirable  
Running water helpful

## EQUIPMENT

4 chairs  
Paper bags  
G Strings  
Bras  
Capes

Handwashing facilities  
Soap, towels  
Water  
Wastebasket  
Toilet tissue

Examining table, 3 x 6, for each physician  
Pad for table (may be folded blanket)  
2 sheets  
Roll of paper to cover sheet  
Scissors for cutting paper  
Table for handwashing facilities, if running water is not available  
Pitcher of water  
Large pail for waste  
Wash basin

DUTIES

ROOMS

EQUIPMENT

7. Reviews the pertinent data on the record for the orthopedist, if necessary. The orthopedist is likely to do this for himself, prior to examining the child

8. Learns if this child is taking exercises so this can be reviewed by the physical therapist before the child is dressed again. Gives this information to the dressing room supervisor

Conference rooms, may be improvised by screening  
One for each public health nurse assigned to interval histories and interviews

One for each nutritionist, physical therapist, vocational rehabilitation representative, and social service worker

Paper towels, soap  
Table  
Tongue depressors  
Otoscope  
Stethoscope  
Percussion hammer  
Tape measure (steel)  
Alcohol  
Nursing bag  
Pen, ink, blotter  
Paper clips  
Route slips  
Pencils  
Waste basket

Desk, 3 chairs  
Paper clips  
Pencil, pen, ink  
Blotter  
Note pad to record data for parents  
Kleenex

For nurse's use:  
Route Slip  
List of Approved Hospitals  
List of Approved Surgeons  
Application Blank

Forms for recording service and other equipment as desired by the following:  
nutritionist  
physical therapist  
vocational rehabilitation representative  
social service worker

Post clinic conferences. The director of the unit is perhaps the logical chairman of this conference. It is important to schedule and announce this conference, well in advance of the clinic date.

All clinic personnel should participate, including the orthopedists, the nurses, the physical therapists, the rehabilitation representative, and others who have any part in the plans for care of these children.

The committee members should review individual records with the idea of determining which of the crippled children to consider for active follow-up work after this conference. Usually the committee recommends for intensive follow-up, all new cases and cases where medical and nursing care plans are not being followed to the satisfaction of the professional workers.

One procedure for reviewing the individual case is to have each worker outline for the group what he or she has recommended, the manner in which the parent or patient has received the various recommendations, and what the parent and patient feel are their problems in relation to following the plan for care. The chairman should pull the facts together, point out overlapping or conflicting recommendations, and approve a plan of action designed to benefit the patient most, and to utilize the time of professional workers to the best advantage.

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All State Department of Health publications on child health.

## ADULT HEALTH SUPERVISION

Adult health supervision as a part of the generalized public health nursing service for adult persons endeavors to promote and preserve maximum health for this age group.

### Objectives

1. To participate in conserving and maintaining maximum health for every adult, through teaching the importance of and measures for preserving positive health and preventing illness
2. To participate in returning to maximum health every person who is ill, through interpreting the need for, and assisting with the securing of adequate medical and nursing supervision.

### Functions

1. To know and be able to interpret, when requested or indicated, the state and local facilities available for preventing, detecting, and treating disease
2. To know the needs of the area to be served and to plan the nursing program to help meet these needs by:

Utilizing morbidity and mortality statistics of the area in planning the program

Learning the community resources available to this age group, including hospital facilities for the care of acute and chronic diseases

Obtaining information and advice regarding adult health supervision from the local health officer and physicians

3. To promote the complete reporting of reportable diseases
4. To teach the importance of adequate medical and nursing care, including periodic physical examination
5. To help prevent unnecessary illness by teaching:

Scientific health facts in the interest of general personal hygiene. This includes mental hygiene

The importance of periodic physical examinations, which include chest X-ray, serologic test for syphilis, and other special studies

The value of approved immunizations

The necessity for individuals to seek medical advice when warning symptoms appear, such as, elevation of temperature, pain, cough, loss of weight, nausea, irregular bleeding, persistent lumps or thickening, sores that do not heal, recurring indigestion, body rash, chronic feeling of fatigue, unexplained constipation or diarrhea, etc.

6. To teach relatives and attendants, through demonstrations and other means, how to follow medical instructions, and how to provide maximum comfort for the patient.

### Management of Service

Case finding. In the course of her family health services the nurse will find individuals who need adult health supervision. Referrals may come from official and non-official health and welfare agencies as well as from family members, relatives, friends, or neighbors. Cases may also be referred from private physicians, or from venereal disease, tumor,

tuberculosis, mental hygiene, or other clinics. The Rapid Treatment Centers in Texas and the M. D. Anderson Hospital for Cancer Research also provide additional means of case finding.

Case selection. Health supervision should be available to every individual within the community; however, the scope of this service is determined by the number of nursing personnel, the needs of the community, and the individual referrals for service.

Case load. The nursing case load should be limited to a number for which effective service is possible.

Frequency of visits. This will depend upon the size of the area and the number of individuals to be served; the patient's and the family's need, desire, and ability to accept health supervision, as well as the various aspects of the condition or disease.

Termination of service. If the patient has recovered or his condition has improved, or if he and his family are apparently able to carry on without supervision, service may be terminated. The limited number of nursing personnel to give health supervision and the new individuals needing such service are other reasons for termination of service in some cases. In rare instances, termination of service may be requested by the family physician or the patient.

### Home Visiting

Home visiting is an essential part of the adult health supervision program. It is a learning experience for the patient, the family, and the nurse, as well as a teaching opportunity for the nurse.

Content. The nurse should adapt her health teaching to the need

and the educational background of the patient and the family. She may interpret scientific principles related to a specific health problem and demonstrate health and nursing procedures to the patient, members of the family, or the attendants. The attending physician's diagnosis and orders, and the health needs of the patient determine the content of the visit.

Teaching aids. The demonstration of procedures to the patient, whenever possible, and having these demonstrations returned by the patient or a member of the family are valuable teaching aids. The use of visual aids, such as suitable printed material, reinforces teaching points the nurse has made to the family.

#### Recording

It has been said that "things worth doing are worth recording", and this is especially true in adult health supervision where the psychological, social, and emotional factors are so closely interwoven with the physical ones. It is necessary to know the volume and type of service given; these data in turn serve as a guide in studying the health conditions and needs of the community. Records also aid in planning the nursing program for adult health supervision and in interpreting the work to the lay public as well as to interested, related agencies. Sample record forms and instructions regarding their use are contained in Section VIII of the Manual of Records and Procedures.

#### References

M. D. Anderson Hospital for Cancer Research. Requirements and Procedures for Admission to Clinic and Hospital. Houston, Tex., 1948

National Cancer Institute. Facing the Facts About Cancer. 22 E. 38th St., New York, N. Y., Public Affairs Committee, Inc., 1947

National Organization for Public Health Nursing. Manual of Public Health Nursing. 3rd ed. New York, N. Y., The Macmillan Co., 1941

Rue, Clara B. The Public Health Nurse in the Community. Philadelphia, Pa., W. B. Saunders Co., 1944

Waterman, Theda L. Nursing for Community Health. Philadelphia, Pa., J. A. Davis Co., 1944.

### Suggested Reading

Lawton, George. Aging Successfully. New York, N. Y., Columbia University Press., 1946

Texas Cancer Bulletin. Houston, Tex., M. D. Anderson Hospital for Cancer Research. Monthly publication.

Dorland, W. T. Medical Dictionary. Springfield, Ill., C. C. Thomas Co., 1944. \$2.50

Falls, Frederick W. and Jane B. Maternal and Child Health. St. Louis, Mo., C. V. Mosby Co., 1944. \$3.50

Fursten, Robert F. and Kenneth C. Child Health. St. Louis, Mo., C. V. Mosby Co., 1944. \$3.50

Levin, William. Maternal and Child Health. Philadelphia, Pa., W. B. Saunders Co., 1944. \$3.50

Olson, Ruth E. Health Teaching in Schools. Philadelphia, Pa., W. B. Saunders Co., 1944. \$3.00

Ross, Julius K. and Evelyn C. Infant, The Maternal and Nursing Care. Philadelphia, Pa., J. B. Lippincott Co., 1944. \$4.00

Huber, Elsie C., Carolyn Gray and Carolyn Stachura. Textbook of Anatomy and Physiology, 11th ed. New York, N.Y., The Macmillan Co., 1944. \$4.00

Kohn, D. H. Health Systems, The Psychology of Personal Attainment. New York, N. Y., Holt Co., 1944. \$3.10

\* All costs listed are the latest available ones but prices of literature are changing so rapidly that some of them are probably higher now than when the list was compiled.



## APPENDIX A

### SUGGESTED BASIC LIBRARY FOR PUBLIC HEALTH NURSES

#### BOOKS

- American Public Health Association. The Control of Communicable Diseases, 6th ed. 1790 Broadway, New York, N. Y. 1945. 35¢
- Anderson, Gaylord W. and Margaret G. Arnstein. Communicable Disease Control, 2nd ed. New York, N.Y. The MacMillan Co. 1941. \$5.00
- Cady, Louise Lincoln. Nursing in Tuberculosis. Philadelphia, Pa. W.B. Saunders Co. 1948. \$3.75
- Dallas Morning News. Texas Almanac and State Industrial Guide. Dallas, Texas. Dallas Morning News. 1947-48. 35¢ (Newstand) \$1.00 (mail)
- Dorland, W. A. Newman. The American Illustrated Medical Dictionary. (Pocket Book Size), 20th ed. Philadelphia, Pa. W. B. Saunders Co. 1944. \$2.50
- Falls, Frederick H. and Jane R. McLaughlin. Obstetric Nursing. St. Louis, Mo. C. V. Mosby Co. 1946. \$3.50
- Funsten, Robert V. and Carmelita Calderwood. Orthopedic Nursing. St. Louis, Mo. C. V. Mosby Co. 1943. \$3.50
- or
- Lewin, Phillip. Orthopedic Surgery for Nurses, Including Nursing Care. Philadelphia, Pa. W. B. Saunders Co. 1947. \$3.50
- Grout, Ruth E. Health Teaching in Schools. Philadelphia, Pa. W. B. Saunders Co. 1948. \$4.00
- Hess, Julius H. and Evelyn C. Lundeen. The Premature Infant, Its Medical and Nursing Care. Philadelphia, Pa. J. B. Lippincott Co. 1941. \$4.00
- Kimber, Diana C., Carolyn Gray and Carolyn Stackpole. Textbook of Anatomy and Physiology, 11th ed. New York, N.Y. The Macmillan Co. 1944. \$4.00
- Klein, D. B. Mental Hygiene, the Psychology of Personal Adjustment. New York, N. Y. Holt Co. 1944. \$3.10

\* All costs listed are the latest available ones but prices of literature are changing so rapidly that some of them are probably higher now than when the list was compiled.

McCollum, E. V. and J. Ernestine Becker. Food, Nutrition, and Health, 6th ed. Baltimore, Md. Johns Hopkins University. 1947. \$2.00

Morris, Evangeline Hall. Public Health Nursing in Syphilis and Gonorrhoea. Philadelphia, Pa. W. B. Saunders Co. 1946. \$2.25

Mustard, Harry S. An Introduction to Public Health, 2nd ed. New York, N. Y. The Macmillan Co. 1944. \$3.50

or

Smillie, Wilson G. Public Health Administration in the United States, 2nd ed. New York, N. Y. The Macmillan Co. 1943. \$6.50

National Organization for Public Health Nursing. Manual of Public Health Nursing, 3rd ed. New York, N. Y. The Macmillan Co. 1941. \$3.00

National Organization for Public Health Nursing. The Public Health Nursing Curriculum Guide. 1790 Broadway, New York, N. Y. 1942. \$2.00

Olson, Lyla M. Improvised Equipment in the Home Care of the Sick, 4th ed. Philadelphia, Pa. W. B. Saunders Co. 1947. \$1.50

Rue, Clara B. The Public Health Nurse in the Community. Philadelphia Pa. W. B. Saunders Co. 1944. \$2.50

or

Waterman, Theda L. Nursing for Community Health. Philadelphia, Pa. F. A. Davis Co. 1947. \$3.50

Spock, Benjamin. Baby and Child Care. New York, N. Y. Pocket Books Inc. Rockefeller Center. 1947. 35¢

Wales, Marguerite. The Public Health Nurse in Action. New York, N.Y. The Macmillan Co. 1941. \$3.75

Webster, Nathaniel. Collegiate Dictionary. 7th ed. Springfield, Mass. G. and C. Merriam Co. 1944. \$3.00

or

Any comparable standard dictionary

Wolf, Lulu K. Nursing. New York, N. Y. Appleton-Century Co. 1947. \$3.50

#### PERIODICALS

American Journal of Nursing. 1790 Broadway, New York, N. Y. \$4.00 yearly

American Journal of Public Health. 1790 Broadway, New York, N. Y. \$5.00 yearly



APPENDIX B

PUBLIC HEALTH, WELFARE AND MEDICAL FACILITIES IN TEXAS

CANCER FACILITIES

CANCER HOSPITALS

HOUSTON

M.D. Anderson Hospital for Cancer Research, 2310 Baldwin Street is the official State Cancer Hospital. (Hospitalization or out-patient clinic service for persons who have, or are suspected of having, a neoplastic or allied disease. A patient under treatment by a private physician may be seen in consultation relative to diagnosis or appropriate treatment, at the written request of the patient's physician.)

Diagnostic and/or Treatment Clinics

AMARILLO

Potter County Medical Society Tumor Clinic

AUSTIN

Travis County Medical Society Tumor Clinic, Brackenridge Hospital

CORPUS CHRISTI

Nueces County Medical Society Tumor Clinic, Memorial Hospital

DALLAS

Baylor University Hospital, 3301 Junius Ave.

Parkland Hospital, 3819 Maple Ave.

EL PASO

El Paso County Medical Society Tumor Clinic, City-County Hospital

FORT WORTH

Tarrant County Cancer Clinic, City-County Hospital

Harris Hospital Cancer Clinic

GALVESTON

John Sealy Hospital Tumor Clinic

HOUSTON

Jefferson Davis Hospital Tumor Clinic

M.D. Anderson Hospital Tumor Clinic

SAN ANTONIO

Baptist Memorial Hospital Tumor Clinic

Nix Hospital Tumor Clinic

Santa Rosa Hospital Tumor Clinic

Robert B. Green Hospital Tumor Clinic

TEMPLE

Kings Daughters Hospital

Scott and White Hospital

TEXARKANA

Bowie-Miller County Medical Society Tumor Clinic, Bowie County Health Unit

WICHITA FALLS

Wichita County Medical Society Tumor Clinic, Wichita General Hospital

PREMATURE INFANT CENTERS

AUSTIN

Brackenridge City-County Hospital

DALLAS

Parkland City-County Hospital

GALVESTON

John Sealy Hospital

CRIPPLED CHILDREN'S CARE

Hospitals designated for use by the Crippled Children's Division

ABILENE

Hendrick Memorial Hospital, 19th and Hickory Sts.

AMARILLO

St. Anthony's Hospital, 711 No. Polk St.

AUSTIN

Brackenridge Hospital, 1400 East Ave.

BEAUMONT

Hotel Dieu Hospital, 1425 Sabine Pass Ave.

CORPUS CHRISTI

Memorial Hospital, 2701 Buford St.

Crippled Children's Hospital, 1416 Third St.

Spohn Hospital, 1436 Third St.

DALLAS

Baylor University Hospital, 3301 Junius Ave.

Bradford Memorial Hospital, 3512 Maple Ave.

Children's Hospital of Texas, 2306 Welborn Ave.

Dallas Methodist Hospital, 301 W. Colorado Ave.

Scottish Rite Hospital, 2201 Welborn Ave.

EL PASO

Hotel Dieu Hospital, 1014 No. Stanton St.

Southwestern General Hospital, 2001 Erie St.

FORT WORTH

City-County Hospital, 1500 So. Main St.

Harris Memorial Methodist Hospital, 1300 Cannon St.

St. Joseph's Hospital, 1401 So. Main St.

GALVESTON

John Sealy Hospital, 816 Strand St.

HOUSTON

Houston Methodist Hospital, 3020 San Jacinto St.

Memorial Hospital, 602 Lamar Ave.

St. Joseph's Infirmary, 1910 Crawford St.

Jefferson Davis Hospital, 1801 Buffalo Dr.

PORT ARTHUR

St. Mary's Hospital, 1931 Ninth Ave.

SAN ANTONIO

Baptist Memorial Hospital, 111 Dallas St.

Santa Rosa Hospital, 745 W. Houston St.

WACO

Crippled Children's Hospital, 1501 No. Eighteenth St.

Hillcrest Memorial Hospital, 3000 Herring St.

Providence Hospital, 1825 Colcord St.

WICHITA FALLS

Wichita Falls Clinic Hospital, 1300 Eighth St.

Wichita General Hospital, 1600 Eighth St.

Physicians designated for use by the Crippled Children's Division

Orthopedic Surgeons

ABILENE

Dr. Frank C. Hodges, 1442 No. Third St.

AUSTIN

Dr. Sandy Esquivel, 1306 Rio Grande St.

Dr. A. A. Tisdale, 403-A W. Fifteenth St.

BEAUMONT

Dr. G. Bruce Stephenson, Goodhue Bldg.

CORPUS CHRISTI

Dr. K. J. Kemp, Medical-Professional Bldg.

Dr. A. K. Rodholm, 1611 Fifth St.

Dr. Stephen A. Williams, 319 Furman Bldg.

DALLAS

Dr. D. K. Barnes, 3701 Maple Ave.

Dr. H. H. Beckering, 3701 Maple Ave.

Dr. Felix Butte, Medical Arts Bldg.

Dr. T. W. Bywaters, Medical Arts Bldg.

Dr. Brandon Carrell, 3701 Maple Ave.

Dr. Floyd S. Franklin, 4317 Oak Lawn Ave.

Dr. P. M. Girard, 2601 Welborn Ave.

Dr. Ruth Jackson, 3629 Fairmount St.

Dr. Marvin Pierce Knight, 2618 Welborn Ave.

Dr. Eugene P. Legg, Medical Arts Bldg.

Dr. Joe McGuire, Medical Arts Bldg.

Dr. Ben Schoolfield, Medical Arts Bldg.

Dr. Margaret Watkins, 3629 Fairmount St.

Dr. Paul C. Williams, Medical Arts Bldg.

#### EL PASO

Dr. W. Compere Basom, 520 Montana St.

Dr. Louis W. Breck, 520 Montana St.

Dr. David Cameron, First National Bank Bldg.

Dr. S. Perry Rogers, Roberts-Banner Bldg.

#### FORT WORTH

Dr. Charles F. Clayton, Medical Arts Bldg.

Dr. William A. Knapp, 623 So. Henderson St.

Dr. Louis J. Levy, Medical Arts Bldg.

Dr. H. S. Renshaw, Medical Arts Bldg.

#### GALVESTON

Dr. G. W. N. Eggers, John Sealy Hospital

#### HARLINGEN

Dr. Dudley W. Smith, 319 Rio Grande Bldg.

#### HOUSTON

Dr. W. E. Barker, Medical Arts Bldg.

Dr. Fred A. Bloom, 4705 Montrose Blvd.

Dr. James R. Bost, Medical Arts Bldg.

Dr. E. M. Cowart, 4705 Montrose Blvd.

Dr. Solomon David, Medical Arts Bldg.

Dr. Denman C. Hucherson, 1012 Rosedale Ave.

Dr. F. O. McGehee, Niels Esperson Bldg.

Dr. Duncan McKeever, Bankers Mortgage Bldg.

Dr. I. S. McReynolds, Medical Arts Bldg.

Dr. J. M. Mitchner, Medical Arts Bldg.

Dr. Edward T. Smith, Medical Arts Bldg.

#### SAN ANTONIO

Dr. E. A. Cayo, Medical Arts Bldg.

Dr. J. W. Goode, 205 Camden St.

Dr. J. J. Hinchey, 643 Moore Bldg.

Dr. Walter Stuck, Nix Professional Bldg.

#### TEMPLE

Dr. Robert A. Murray, Scott & White Clinic

#### TYLER

Dr. Milton Freiberg, 420 So. Chilton St.

#### WACO

Dr. Herbert E. Hipps, 1604 Columbus Ave.

#### WICHITA FALLS

Dr. Jack E. Maxfield, 1300 Eighth St.

Plastic Surgeons

SAN ANTONIO

AUSTIN

Dr. Howard Granberry, Scarborough Bldg.

Other Resources

DALLAS

Dr. James T. Mills, Medical Arts Bldg.

EL PASO

Dr. W. W. Schuessler, First National Bank Bldg.

FORT WORTH

Dr. Albert D. Roberts, 923 Pennsylvania Ave.

GALVESTON

Dr. Truman G. Blocker, John Sealy Hospital

HOUSTON

Dr. Thomas D. Cronin, 2300 Caroline St.

Dr. Sidney Baron Hardy, 3603 Audubon Pl.

SAN ANTONIO

Dr. Charles W. Tennison, Nix Professional Bldg.

Oral Surgeons

DALLAS

Dr. A. L. Frew, 4105 Live Oak St.

SAN ANTONIO

Dr. Franz Stumpf, Medical Arts Bldg.

Other Resources

ABILENE

Northwest Texas Representative of the National Foundation for Infantile Paralysis, P. O. Box 1838

AUSTIN

State Department of Health, Crippled Children's Division  
(Medical, nursing, and hospital care for crippled children under 21 years of age)

DALLAS

Northeastern Texas Representative of the National Foundation for Infantile Paralysis, 1501 Cotton Exchange Bldg.

Texas Scottish Rite Hospital for Crippled Children, 2201 Welborn Ave.  
(Medical, nursing and hospital care for crippled children up to 15 years of age)

GALVESTON

Children's Hospital, University of Texas Medical Branch  
(Diagnostic clinic for children up to 15 years of age)

GONZALES

Gonzales Warm Springs Foundation for Crippled Children, P. O. Box 58  
(Hospitalization of Anglo and Latin American convalescent and chronic poliomyelitis patients over two years of age)

OTTINE

Texas Elks Crippled Children, Inc., P. O. Box 7  
(Convalescent care and rehabilitation for crippled children up to 14 years of age)

SAN ANTONIO

Southwest Texas Representative of the National Foundation for Infantile Paralysis, San Antonio Health Center

TYLER

Southeast Texas Representative of the National Foundation for Infantile Paralysis, 221½ No. Broadway

HEALTH AND WELFARE FACILITIES

Write directly to the agency concerned for additional information and application forms.

ABILENE

Abilene State Hospital  
(Hospitalization and school for Anglo and Latin American persons, over six years of age, with epilepsy)

AUSTIN

Austin State Hospital  
(Hospitalization of Anglo Americans, Latin Americans, and Negro persons of unsound mind)

Austin State School  
(School for mentally retarded Anglo and Latin Americans over six years of age)

Texas Blind, Deaf, and Orphans' School  
(School for blind, deaf, and orphan Negro children, seven to twenty years of age)

Confederate Home for Men  
(Hospitalization of aged, senile men, transferred from the State Hospital)

Confederate Home for Women  
(Home and hospitalization for Confederate veterans' wives)

Austin State School for the Blind  
(School for blind Anglo and Latin American Children, six to nineteen years of age)

Texas State School for the Deaf  
(School for deaf Anglo and Latin American children, six to twenty one years of age)

BIG SPRINGS

Big Springs State Hospital  
(Hospitalization of Anglo and Latin American persons of unsound mind)

BRADY

Brady State School for Colored Girls  
(School of correction for delinquent Negro girls)

CORSICANA

State Orphan Home  
(Home and school for orphan children)

GAINESVILLE

Gainesville State School for Girls  
(School of correction for delinquent Anglo and Latin American girls)

GALVESTON

Galveston State Psychopathic Hospital  
(Hospitalization of Anglo and Latin American persons, fourteen to sixty years of age, with acute neurologic, psychoneurotic, and psychotic problems. Mental defectives not admitted)

GATESVILLE

Gatesville State School for Boys  
(School of correction for delinquent Anglo American, Latin American, and Negro boys)

KERRVILLE

Kerrville State Sanatorium  
(Hospitalization of Negro patients, six to sixty years of age, who have a medical diagnosis of tuberculosis)

MISSION

Weaver H. Baker, State Memorial Tuberculosis Hospital  
(Hospitalization of Anglo and Latin American patients, six to sixty years of age, who have a medical diagnosis of tuberculosis)

RUSK

Rusk State Hospital  
(Hospitalization of Anglo-American and Latin-American persons of unsound mind)

SAN ANTONIO

San Antonio State Hospital  
(Hospitalization of Anglo and Latin American persons of unsound mind)

SANATORIUM

State Tuberculosis Sanatorium  
(Hospitalization of Anglo and Latin American patients, six to sixty years of age, who have a medical diagnosis of tuberculosis. There is a 175 bed Preventorium for children)

TERRELL

Terrell State Hospital  
(Hospitalization of Anglo American, Latin American, and Negro persons of unsound mind)

TYLER

East Texas Tuberculosis Sanatorium  
(Hospitalization of Negro patients, six to sixty years of age, who have a medical diagnosis of tuberculosis)

WACO

Waco State Home  
(Home and school for Anglo and Latin American orphans)

WICHITA FALLS

Wichita Falls State Hospital  
(Hospitalization of Anglo and Latin American persons of unsound mind)

RAPID TREATMENT CENTERS

OVERTON

Rocky Mount Hospital

SAN ANTONIO

Mission Medical Center

WACO

Riverside Hospital

FACILITIES FOR CARE OF

UNMARRIED MOTHERS

EL PASO

Salvation Army Home and Hospital, 3918 Bliss St.  
(17 beds for Anglo and Latin-American women)

FORT WORTH

Volunteers of America, Majestic Building, or Ave. J  
(22 beds for Anglo and Latin-American women)

West Texas Maternity Hospital, 2306 Hemphill St.  
(32 beds for Anglo-American Women)

HOUSTON

Bell's Boarding Home, 5401 Herche St.  
(Eight rooms for Negro women)

Florence Crittendon Home, 5009 Scotland St.  
(29 beds for Anglo and Latin-American women)

George Boarding Home, 1020 Swartz St.  
(Six beds for Negro women)

## PILOT POINT

Rest Cottage  
(34 beds for Anglo and Latin-American women)

## SAN ANTONIO

Salvation Army Home and Hospital, 4019 Broadway  
(10 beds for Anglo and Latin-American women)

Texas Mission Home and Training School, 103 Ninth St.  
(Six beds for Anglo and Latin-American women)

## OTHER RESOURCES

### AUSTIN

State Board of Vocational Education, Vocational Rehabilitation Division,  
302 Walton Bldg.  
(Vocational rehabilitation for disabled persons over 16 years of age)

State Department of Education, Division of Special Education for Ex-  
ceptional Children, Capitol Bldg.  
(Special education for exceptional children)

State Department of Public Welfare, Child Welfare Division, 703 Tribune  
Bldg., P. O. Box 1156  
(Consultation and assistance on child welfare problems)

## References

Texas Almanac. The Dallas Morning News, Dallas, Texas

Handbook on Agencies and Organizations Concerned with Care, Education,  
Training, and Treatment of Handicapped and Crippled Children. C.C. 3,  
No. 8684. Texas State Department of Health, Austin, Texas

APPENDIX C

MASS X-RAY SURVEYS

Mass chest X-ray surveys are offered to communities through the State Health Department and the State Tuberculosis Association.

To have a survey a written request must be made to the State Health Department by a responsible officer of the county medical society. The Tuberculosis Division of the State Department of Health furnishes the machines, the personnel to operate them, the films, and the interpretation of the films. The survey is usually sponsored as a cooperative project by the local official and voluntary health agencies with the assistance of the local civic groups. All persons in the community who are 15 years of age or over are eligible for X-ray. More detailed information is found in the pamphlet published by the State Health Department "Mass Chest X-ray Survey, TB 9132."

## APPENDIX D

### TUBERCULOSIS REGISTER

The Tuberculosis Register has three purposes:

1. To direct the public health supervision of all significant cases
2. To provide statistical information
3. To provide reference information about a patient and his current status.

The register should contain every known diagnosed case of tuberculosis with contacts in the jurisdiction of the health unit. It should show his medical supervision, hospitalization, public clinic, or private physician, the stage and clinical status of the disease, and the sputum status.

Such a register will eliminate the possibility of patients being forgotten, and will show at a glance whether the patient is receiving the supervision he needs, and if his contacts have been examined. It will help to make the nurse's work more effective and aid her in guidance, education, and supervision of patients. The register is valueless unless it is kept up-to-date. A complete review should be made at least every six months.

Samples of the various records and instructions for setting up and maintaining a tuberculosis case register are found in the Record Manual. This is primarily a clerical function, but usually the supervision of a nurse is needed.

## APPENDIX E

### MASS BLOOD SURVEYS

In addition to the regular case finding activities carried on by the Venereal Disease Division, State Department of Health, two mobile blood units are provided to work in selected areas of the State.

These mobile units operate primarily in localities where there are no health unit facilities. They function from the central office through the Venereal Disease Control Division under the jurisdiction of a city or county health physician with the approval of the local medical society.

Before a blood testing program is inaugurated in a community, an advance man from the Venereal Disease Control Division goes into the county, and obtains approval and cooperation from county medical societies. Cooperation is also sought from city officials, superintendents of schools, county officials, and leaders in Negro groups.

A schedule is then arranged, providing for motion pictures, lectures on venereal diseases, and dates when bloods will be taken.

Positive cases are referred to the city and county health officers or to private physicians, who in turn refer the majority of indigent cases to one of the three rapid treatment centers for diagnosis and treatment. All positive cases found in this manner are screened by every physician in the area in order to determine whether the cases have been previously treated by them, or to pick from these cases the ones who can afford to pay for treatment.

## APPENDIX F

### RAPID TREATMENT CENTERS

In 1941 Representative Lanham secured the passage in Congress of an act which provided funds for additional community facilities.

Under this act, it was possible to set up special hospitals known as rapid treatment centers. These centers are designed to provide complete treatment by rapid means to individuals who are infected with venereal diseases.

The first rapid treatment centers in Texas were set up early in 1943. The centers are under the administration of the State Health Officer, who supervises their function through the Division of Venereal Disease Control. The treatment center itself is under the immediate supervision of a medical officer, assisted by a staff of technical and business personnel. They are hospitals, which observe quarantine regulations and supervision over contagious cases.

#### Acceptable cases

The purpose of the hospitals is to assist private physicians and health officers in caring for indigent and semi-indigent patients with syphilis. These hospitals accept both males and females, as well as children of all races.

Since the primary aim of the rapid treatment center is to place the untreated or inadequately treated cases of venereal diseases under approved therapy, to render the infectious cases non-infectious, and to prevent disabling complications, a selection of acceptable cases must be made. At this time the centers accept all types of syphilis except

cardiovascular syphilis, patients not ambulatory, or not able to take care of themselves, and psychotic cases. They also accept for treatment lymphogranuloma venereum and granuloma inguinale. Cases of gonorrhoea are not accepted.

It is recommended that the clinics refer late latent cases of syphilis in addition to primary, secondary, and early latent patients. Since the centers are available to a large percentage of clinic patients, it is apparent that by referral of these patients, the case holding in the clinic will be reduced to a minimum, permitting more time to be spent by clinic personnel on interviewing and case finding of infectious syphilis. Children referred to the centers should be accompanied by parent or guardian. On the admission form signature of parent or guardian must be obtained, authorizing treatment for all minors.

The names of contacts obtained by interviewing clinic cases should be placed on the back of the admission form of the patient referred to the centers, to prevent a duplication of contact forms being made by rapid treatment center personnel. The name of each contact obtained in the clinic should be reported as soon as possible to the central office on the regular VDIA (Contact) Form.

At the present time, transportation of patients to and from the centers is available. Regular schedule of buses to the area within the rapid treatment center limits is maintained. If the patient is unable to pay for transportation, arrangements should be made through the county officials to supply this service. The word "Common Carrier" should not be construed as the regular transportation furnished by the rapid treatment



## APPENDIX G

### SYPHILIS

The following outline presents pertinent information on the venereal diseases.\*

<u>Popular Names</u>	Lues, syph, bad blood, pox
<u>Definition</u>	A chronic, constitutional, infectious and contagious disorder, congenital or acquired, which may attack any tissue or organ in the body
<u>Etiology</u>	Treponema pallidum, popular term - spirochete
<u>Method of Transmission</u>	Usually sexual intercourse, sometimes kissing and fondling, and prenatal (mother to fetus)
<u>Incubation Period</u>	Average 3 weeks, minimum 10 days, maximum 90 days
<u>Signs and Symptoms</u>	<u>Primary stage</u> Chancre and bubo  <u>Secondary stage</u> Rash, mucous patches, sore throat, headaches, fever, etc.  <u>Early and late latent stages</u> No active manifestations  <u>Late stage</u> Skin lesions, nervous system and cardiovascular involvement

\* "V.D. Case Finding Manual," V.D. Education Institute, Raleigh, North Carolina.

### Congenital syphilis

<u>Transmission</u>	Prematurity, snuffles, with eventual development of bloody nasal discharge and ulceration, saddle nose, disshaped face, saber shins, frontal and parietal bossing, Hutchinson's teeth, interstitial keratitis, deafness, mucous membrane and skin lesions, copper colored glossy rash, jaundice, enlargement of liver and spleen
<u>Diagnosis</u>	Case history, physical examination, clinical signs and symptoms, Darkfield microscopic examination, serological tests (blood and spinal)
<u>Treatment</u>	Penicillin, arsenicals, bismuth, and iodides.

### GONORRHEA

<u>Popular Names</u>	Clap, dose, strain, the drip, running, gleet
<u>Definition</u>	An acute infection usually localized and manifested by inflammation and discharge
<u>Etiology</u>	Gonococcus of Neisser
<u>Method of Transmission</u>	Sexual intercourse and ophthalmia of new born
<u>Incubation Period</u>	Average 3 to 5 days, minimum 1 to 2 days, maximum 2 weeks
<u>Signs and Symptoms</u>	Male: Discharge, pain, inflammation, swelling Female: Possible absence of symptoms, some discharge, pain in abdomen when salpingitis occurs
<u>Complications</u>	May affect bladder, kidneys, urethra, Skene's and Bartholin's Glands, ovaries, fallopian tubes, abdomen, joints, rectum,

heart

Diagnosis Case history, cultures, smears, clinical signs and symptoms, contact evidence for female patients

Treatment Penicillin, and sometimes sulfonamides.

### CHANCROID

Popular Names Soft chancre, blue balls

Definition An acute disease characterized by ulcer on genitals and bubo

Etiology Ducrey Bacillus (Hemophilus Ducreii)

Method of Transmission Sexual intercourse

Incubation Period Average 3 to 5 days, maximum 14 days

Signs and Symptoms Painful, usually multiple ulcers with soft margins, discharge, fetor, and bubo. (No fever). Soft chancre on genitals, inguinal region swelling

Diagnosis Darkfield examination to exclude syphilis, skin test with Ducrey vaccine, case history, clinical signs and symptoms, and smear that is positive for Ducrey Bacillus

Treatment Cleanliness, sulfonamides, hot chemical soaks.

### GRANULOMA INGUINALE

Definition A chronic, ulcerating, granulomatous lesion of the genitalia and inguinal region

Etiology Donovan Bodies

<u>Method of Transmission</u>	Sexual intercourse
<u>Incubation Period</u>	Average variable, has not been actually determined, but may extend from 8 days to 2 months
<u>Signs and Symptoms</u>	Sore on inguinal or perineal region, or genitalia, foul odor, no pain unless secondarily infected. No lymph node involvement
<u>Diagnosis</u>	Darkfield examination to exclude syphilis, case history, presence of Donovan Bodies
<u>Treatment</u>	Cleanliness, aureomycin, streptomycin, faudin, tarter emetic, surgery, X-ray.

LYMPHOGRANULOMA VENEREUM

(Lymphopathia Venereum, Lymphogranuloma Inguinale)

<u>Popular Names</u>	Blue balls
<u>Definition</u>	An infectious disease characterized by initial lesions and marked lymph node involvement. Usually chronic
<u>Etiology</u>	Filterable virus
<u>Mode of Transmission</u>	Sexual intercourse
<u>Incubation Period</u>	Average 7 to 12 days, minimum 5 days, maximum 30 days
<u>Signs and Symptoms</u>	Small, slightly indurated ulcer on genitals, swollen inguinal glands in males. Headache, fever, joint pains, soreness, rectal stricture in late stage in females
<u>Treatment</u>	Rest, drainage, dilatation of rectal stricture, sulfonamides.

## APPENDIX H

### SUGGESTIONS FOR HOME DELIVERY

The list of supplies should be checked with the physician who is to have charge of the delivery. He may wish to suggest and/or provide additional articles.

The room selected for the delivery should be:

- Cheerful, sunny, and easily ventilated
- Near bathroom or kitchen
- Large enough for free working space
- Quiet and provide privacy if at all possible

Supplies for delivery

- Hand brush, clean cake of soap (for doctor and assistant)
- File or orange stick to clean nails
- 2 hand towels

Delivery room equipment

- Pile of clean newspapers one foot high
- 2 boards 1" x 12" to place under the mattress, if bed springs are not firm
- Well protected mattress with cover of new oilcloth, rubber or plastic sheet, or 20 thicknesses of newspaper
- Bed pan or pail
- 2 basins of 3 quart size (one for doctor's hand solution, the other to hold the delivered placenta)
- 1 unopened box of large size sanitary napkins
- 1 lb. cotton, or 2 dozen clean cloth squares 3" x 4" (sterilized at home)
- 2 covered kettles of sterile water (one to be kept hot and one cool)
- 1 dipper or small pitcher
- 1 unopened roll of toilet tissue
- 3 large and 3 small newspaper pads \*

Supplies for mother

- 2 gowns
- 2 sterile sanitary pads
- 2 wash cloths and 2 bath towels (one of each to be kept clean for perineal care)
- 1 face towel
- 1 supporting brassiere
- 1 comfortable sanitary belt
- 2 sheets
- 2 pillow cases
- 1 pair white cotton stockings and light weight, warm blanket (if cold weather)
- Brush and comb

\* Louise Zabriskie. Mother and Baby Care in Pictures. 3rd ed., Philadelphia, Pa., J. B. Lippincott Co., 1946, p. 64.

Tooth paste, dentrifice, and glass

Cake of bath soap

Supplies for baby

1 baby bed with firm mattress, warmed by safe method

1 receiving blanket, lined with clean diaper

Baby bath tray equipment

1 pint bottle mineral, olive, or recommended brand of baby oil

1 small bowl for warming oil

1 covered jar of cotton balls

1 covered jar of large safety pins

1 covered jar of medium to small safety pins

1 sterilized baby bottle of boiled water with protected nipple

1 soft wash cloth

1 soft bath towel

Baby clothing

Shirt

Diapers

Band

Sox or stockings

Warm kimona or gown (opened all the way down front or back)

Baby scales, sterile cord tie and dressing, and silver nitrate drops should be at hand. The doctor may carry these as part of his routine equipment. If not, the family should be assisted in procuring them.

Sterilizing Delivery Supplies

Dressings, 3" x 4" squares, and other supplies of similiar nature that the doctor may require may be sterilized at home. They should be wrapped in a double cloth cover or heavy brown paper, cut large enough to amply cover the dressings. The packs should be tied with string or pinned securely. They should be placed in an oven of 325°F. and baked for 45 minutes. After the oven heat has been turned off they should be allowed to cool in the oven before removal. They should be stored in a protected place until needed.

APPENDIX I

SUGGESTED LESSON PLAN FOR MOTHERS' CLASSES - TYPE A

UNIT II

LESSON I The Hygiene of Pregnancy

- a. Pregnancy, a normal function - not an illness
- b. Should be shared by the entire family
- c. Clothing - dresses, gowns, slips, panties, abdominal support, and brassieres
- d. Posture and gait - need of rest periods
- e. Bathing
- f. Douching
- g. Sexual intercourse
- h. Elimination
- i. Exercise and recreation

Teaching Aids - Clothing exhibit

LESSON II The Hygiene of Pregnancy

- a. Engaging a competent physician
- b. The physical examination - what to expect and what it means
  1. Blood tests and why, blood pressure readings
  2. Urinalysis - its significance
  3. Why measurements are taken
  4. Value of chest X-ray
- c. Body changes
  1. Growth of the uterus
  2. Breast changes - why
  3. Shortness of breath - diaphragm
  4. Circulatory changes - blood volume increase

Teaching Aids - Sphygmomanometer and stethoscope  
Pelvimeter  
List of local physicians

UNIT I

LESSON I The Anatomy and Physiology of Reproduction

Topics for discussion	Subheads	Discussion Leads & questions	Student discussion	Teaching aids
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I. Introduction of teacher Professional education

II. The Pelvis  
a. structure  
b. coccyx  
c. sacrum  
d. muscles

What does the pelvis look like to you?

Bowl? Cradle? Funnel?

Anatomical charts and Birth Atlas

III. Pelvic Organs  
a. Vagina organ of copulation excretory duct birth canal  
b. Uterus organ of gestation  
c. Ovaries development and discharge of ova  
d. Fallopian Tube passage for ova passage for sperm  
e. Bladder storage of urine  
f. Rectum

What are your terms for this part of the body?  
You know it as womb.

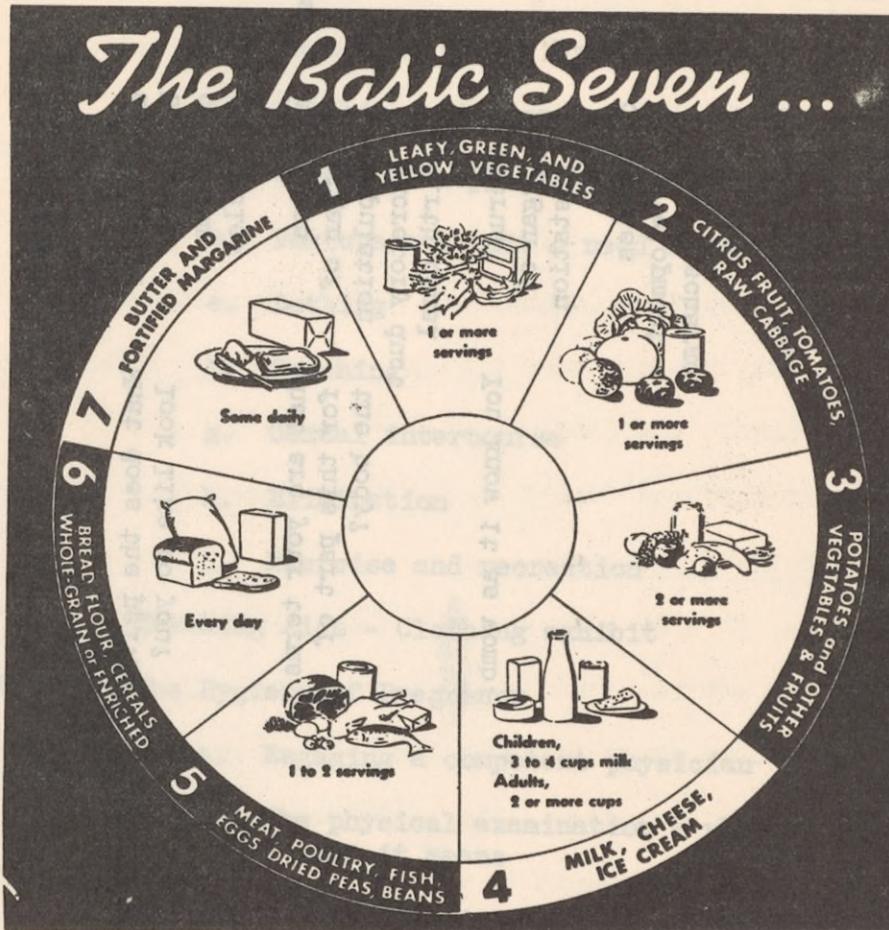
Sometimes we have tubal pregnancies. How does this happen?

Film: "Story of Menstruation" or "Human Growth"

Why is this organ considered here?

APPENDIX J

EXAMPLES OF TEACHING NUTRITION



A thorough knowledge of the "Basic Seven" food grouping and the ways these foods are utilized by the body for growth and energy will be helpful to the nurse in evaluating family diets and in teaching nutrition.

The concept of the "Basic Seven" food groups is a useful tool; however,

it often becomes necessary to interpret these basic groups carefully. Frequently the family income does not permit the provision of all the basic foods in the recommended amounts, or the cultural group to which the family belongs does not habitually use foods of one or another of the groups. In such situations the nurse may render valuable service to the family by teaching a wise selection of acceptable foods from within a group and/or the substitution of foods in one group for foods in another.

For example, if a family regularly selects from Group I, carrots, green beans, and yellow squash it might be providing carotene (Vitamin A) quite adequately, depending upon the amounts of these vegetables used. If, however, the family cannot buy the recommended amount of milk and cannot get anything from the orange, grapefruit, and tomato group, for some reason, their selection of food from Group I becomes more critical. By selecting from this group such vegetable as turnip greens, mustard greens, or collards, they may, in addition to providing generous amounts of carotene, also increase their calcium intake considerably, and if instructed on proper cooking of these vegetables, provide themselves with adequate amounts of ascorbic acid.\* The public health nurse may consult her local home demonstration agent regarding proper food preparation.

Another example of directing the selection of foods within a basic group is in relation to proteins. Good sources of protein are frequently expensive, and a family may need help in knowing what foods are the most economical.

\*Bowes, Anna de Planter, and Charles F. Church. Food Values of Portions Commonly Used. 6th ed. 311 So. Juniper St., Philadelphia, Pa., 1946, pp. 35-38.

Dried beans are probably the least expensive source of protein, although one must keep in mind the fact that they contain incomplete protein (i.e. are deficient in one or more of the essential amino acids), and consequently should be supplemented with animal protein foods. One and one-half cups of cooked beans provide about 20 grams of protein, which is equivalent to the amount in an average serving of meat (about one-fourth pound). Peanut butter is another inexpensive source of incomplete protein. Four and one-half tablespoons full contain 20 grams of protein.

Eggs may or may not be an inexpensive source of protein, depending upon whether the family has chickens, or on the current price of eggs. Three medium size eggs contain about 20 grams of protein; depending on the cost to the family, one must decide on the relative economy of using them as a major source of protein.

Cottage cheese is an excellent source of protein and usually one of the least expensive. One-half cup of cottage cheese contains about 20 grams of protein. Cottage cheese is not a substitute for milk or the cheddar type (yellow) cheese, as a source of calcium, since cottage cheese made by the usual commercial method has lost a considerable amount of calcium into the whey.\*

The variety meats, such as liver, kidney, heart, and tongue, are usually among the most economical. Pork liver is almost always less expensive than beef or calves' liver, and is actually a better source of iron than the other livers. Introduction of families to these meats, with directions for preparing them, may make a real contribution toward

\*Food Value Tables. Washington, D.C., Federal Security Agency, United States Public Health Service, 1947.

better nutrition. Often families do not buy them because they are unfamiliar with their value or with methods of preparing them. Fish may also be an inexpensive source of protein.

When low income prevents a family from obtaining recommended amounts of animal protein it becomes more important that their cereal foods provide a good quality protein. Whole grain cereals and flour have a superior quality of protein and their use should be encouraged. Refined cereals have had vitamin, mineral, and protein rich components partially removed, and consequently do not have the original nutritive value of the whole grain.



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