

A school of nursing is an educational institution. Education has been described by C.E.M. Joad, "as a device for helping man to grow to his full stature; to enable him to realise his nature both mentally and spiritually and in that realisation become all that he has in him to be." I hope that in our schools of

nursing the student will not only acquire the skill and knowledge needed to be an efficient nurse, but that she will also acquire an attitude to life, a temper and habit of mind, which will sustain her through discouragements and disappointments and enable her to meet any situation with equanimity.

TEACHING MICROBIOLOGY

Classes, demonstrations and laboratory work.

Objectives.

To understand the existence of micro-organisms and their activities; their relation to health and disease; the need for sanitation and hygiene in daily life, and of aseptic measures in nursing; to understand the relationship of microbiology to diagnosis, prevention and treatment of disease.

Subject Matter.

This subject is the major topic of the first year part of the curriculum. The greater part of the first three months should be given to concrete and visual instruction; co-operation of the laboratory is most essential. The long period devoted to this subject may be questioned but it is necessary especially if the students have had no previous experience in science and no knowledge of the subject. Without this preliminary instruction other subjects *i.e.* nursing arts, asepsis, hygiene etc. are meaningless.

Introduction.

The principle of magnifying objects; use of hand lens and microscope.

1. Demonstration of microscopic forms of life. Students to collect own material for examination where possible *i.e.* water from local well or river to show protozoa etc.; compare water from different sources.

2. Demonstrate that sunlight and boiling kills such life.

3. Demonstrate properties of certain antiseptics *i.e.* carbolic acid etc.

4. Prepare germ gardens *i.e.* incubation at room temperature which is easy

in India; bacterial colonies grown from flies legs; spray from a cough, from dust etc.

5. Infection and the effect of invasion of the body with micro-organisms.

6. Sanitary practices in the disposal of body discharges.

7. Reasons for personal hygiene and healthful habits; the importance of hand washing, especially before meals.

8. Careful methods in nursing technique; cleanliness especially important when dealing with sick people. Disinfection, sterilization etc.

9. Parasitology very important in India, interest best aroused by visual demonstration. Life histories of flies, mosquitoes, parasitic worms, lice etc. Development of mosquitoes in class room. Demonstration of stools for amoebae, worm eggs etc. Skin parasites. These classes with emphasis on prevention should be in conjunction with lectures and case demonstrations of the common diseases of the country. These diseases should be discussed in the light of local geography and environment; the reason why one local village has more malaria than another; a visit to mosquito breeding grounds. Why people living on the banks of a river have different diseases than those living in the hills. (*Adapted from the Janet Welch report*)

Bibliography.

For sister Tutors and students:

1. Bacteriology and Pathology for Nurses. by E. Irene Clark.

2. Bacteria in Relation to Nursing. by C. E. Dukes.

For Teachers.

Diagnostic Bacteriology by Isabelle Gilbert Schaub.