

THE PREPARATION OF THE NURSE IN THE TUBERCULOSIS FIELD

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OPSOMMING

Tuberkulose is een van die grootste gesondheidsprobleme in Suid-Afrika. As primêre gesondheidswerker speel die verpleegkundige onder andere 'n belangrike rol in alle fasette van tuberkulosesorg.

'n Honderd geregistreerde verpleegkundiges in die Ga-rankuwa-omgewing is gevra om 'n eenvoudige vraelys oor tuberkulose in te vul om hulle vlak van kennis te toets. Die gemiddeld van 70 % wat behaal is, is goed, maar wat van dié wat onder die gemiddelde presteer het? Met 'n belangrike taak soos die uitwissing van tuberkulose moet alle verpleegkundiges wat met tuberkulose pasiënte in aanraking kom oor toereikende kennis beskik.

'n Omvattende indiensopleidingsprogram, wat deur die werkgewer aangebied word, word voorgestel sodat elke verpleegkundige ten volle kan funksioneer op die gebied van tuberkulose.

INTRODUCTION

Nursing has grown and developed profusely during the past century to where it's practitioners today render indispensable services to the people of this country. Nurses are active in all the spheres related to health services and as the primary health workers, are usually the first contact with the patient. Therefore her role in the detection, identification, treatment, referral, follow-up and rehabilitation of patients suffering from tuberculosis can never be underestimated.

To be able to fulfil this role it speaks for itself that nurses will need training to render the best possible service.

CURRENT PREPARATION

An overview of the training of nurses show that their **specific** training in the field of tuberculosis is limited. During the pre-registration training in General Nursing and Midwifery, usually five out of a total of 1140 teaching periods are allocated to tuberculosis.

This may seem insignificant unless the number of teaching periods spent on related subjects are considered. Related subjects providing additional knowledge rele-

vant to tuberculosis treatment include:

- **General Nursing Science and Art patient care and treatment, diagnostic procedures, follow-up services, medical/surgical conditions, nutrition**
- **Pharmacology**
- **Microbiology and Pathology**
- **Preventive and Promotive Health Care**
- **Basic administrative and educational knowledge.**

From this it becomes evident that a substantial portion of the basic knowledge of the student applies to the field of tuberculosis.

The same picture emerges if the post-registration course in Community Nursing Science is analysed.

PRESENT LEVEL OF KNOWLEDGE OF NURSES

Tuberculosis is one of the major health problems in southern Africa with approximately 45 000 cases being notified annually. It is thus logical that the nurses who deal with the patients suffering from it, must know everything about the detection, identification, treatment, referral, follow-up and rehabilita-

tion of these patients.

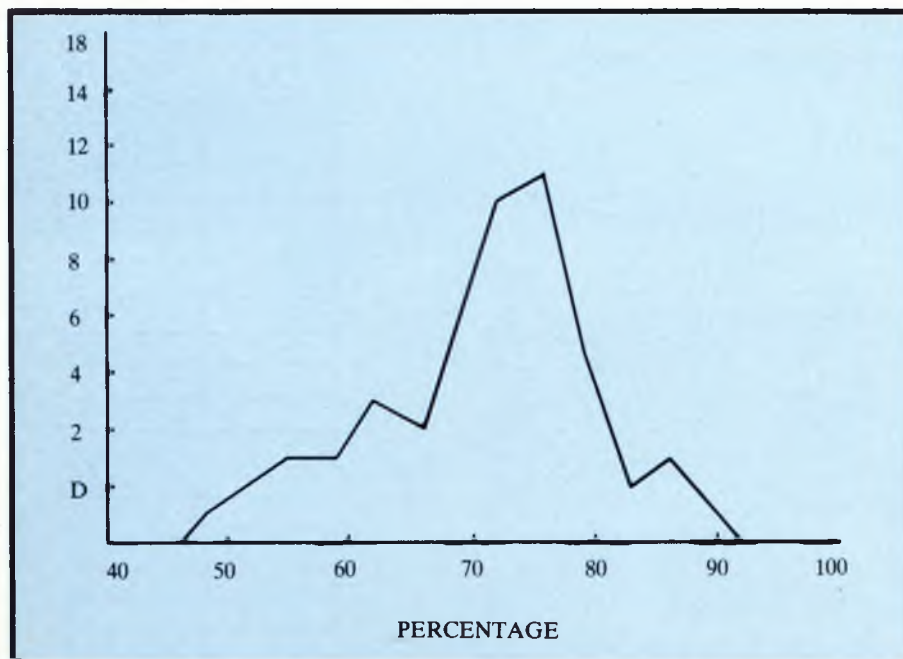
To determine the level of knowledge on tuberculosis of the nurses working in the field, a questionnaire, covering the above aspects and based on the tuberculosis control paper from the Department of Community Health was compiled. A sample of 100 registered nurses working in the Ga-rankuwa region were asked to complete it.

The method of true/false responses to a number of questions was used. Out of the 100 respondents the average percentage of correct answers was 71 %. The highest score was 90 % and the lowest 45 %. The questionnaire is given in table 1, to enable readers to test their own knowledge on tuberculosis.

Divided in clinic and hospital based nurses, the sample consisted of 64 nurses working in clinics and 36 working in hospitals. The percentage obtained by the clinic-based nurses was 71 % as against the 69 % of the hospital-based nurses.

The results obtained in the survey were plotted on a graph according to percentages obtained and the fre-

Figure 1
ACHIEVEMENT OF CLINIC-BASED REGISTERED NURSES IN QUESTIONNAIRE ON TUBERCULOSIS



quency per percentage. Figure 1 shows results for the clinic-based nurses, figure 2 for the hospital-based nurses and figure 3 for the whole group. The picture for the whole group shows a right-slanting curve between 45 % and 90 %.

The median was on 72 % and the mode on 76 %. It thus seems that the average knowledge of the nurses in the survey can be measured at approximately 70 %. The question to be answered is whether 70 % is good enough.

Under the circumstances, in which only 39 % of the respondents

indicated that they have had specific training in the care of patients with tuberculosis, of which 33 had only had occasional lectures in an in-service training course presented at MEDUNSA, the average of 71 % can be considered to be good. But still, there is reason for concern about the 50 % who achieved below the median.

THE SPECIFIC PREPARATION OF THE NURSE IN THE TUBERCULOSIS FIELD

The nurse is indispensable in the field of tuberculosis and for this reason it is important that she will

know everything there is to know about tuberculosis. With such an important task to be done, different levels of knowledge is unacceptable.

There is no objection to training nurses specifically for work in the field of tuberculosis, but that will be a bit short sighted. South Africa does not have the manpower to prepare people for only small parts of the extended health care service. Nurses are today rendering valuable services as primary health care workers, and as such they must be able to identify and cope with a wide range of health problems.

It is suggested that nurses receive a thorough training in the handling of a variety of health problems, of which tuberculosis must be one. The course for the Diploma in Advanced Clinical Nursing lays a good foundation, but the priorities which will indicate the type of service to be rendered must be determined by the health and illness pattern of the specific community. Any formal training must be backed up by a programme of continuing education in which the specific illnesses encountered in that clinic or service must receive the most attention. The ideal would be to determine these priorities on a regular basis, so that the health needs of the local community and the training needs of the nurses could be kept up to date.

The nurses must not be taken out of their working environment for

Figure 2
ACHIEVEMENT OF CLINIC-BASED REGISTERED NURSES IN QUESTIONNAIRE ON TUBERCULOSIS

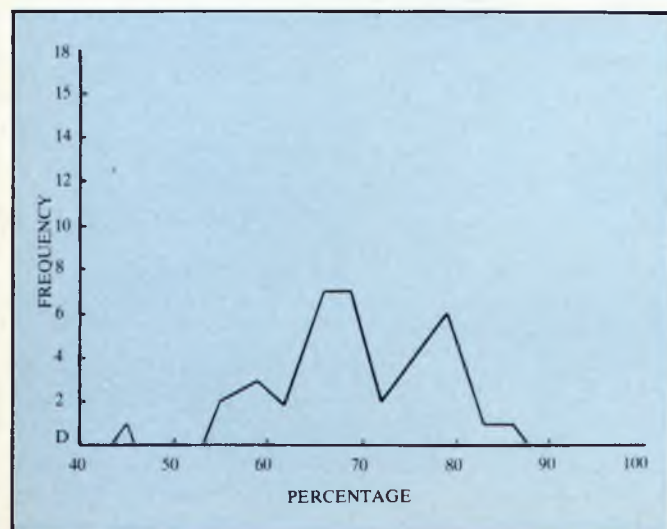
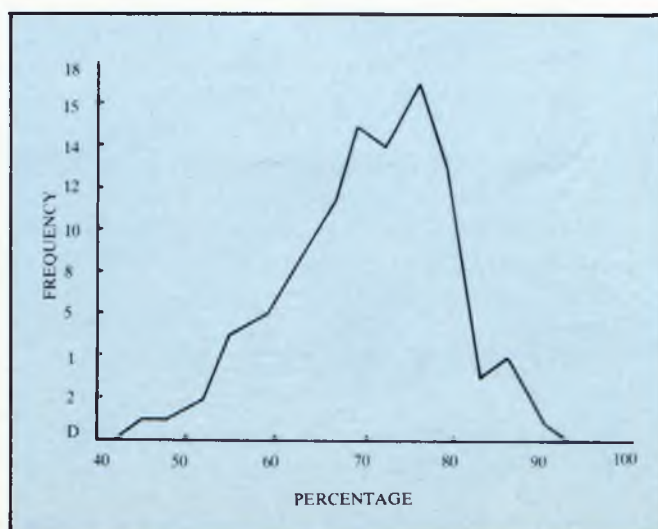


Figure 3
ACHIEVEMENT OF THE WHOLE GROUP OF REGISTERED NURSES IN QUESTIONNAIRE ON TUBERCULOSIS



prolonged inservice education courses after basic training in a field. It would be much better if a knowledgeable person in a specific field could teach them in their clinic on a regular basis.

If they have a proper basis of knowledge to work from, nurses will be able to care for a variety of patients reporting to the clinic, including patients with tuberculosis. Nurses will have to function on their own even more in future and must be able to take vitally important decisions independently. This they can only do if they have the knowledge to back up their decisions.

The following contents for a course which can be presented in the way which is found most suitable for the specific situation, is proposed. At the moment there is no official recognition for a course like this by the South African Nursing Council. Any well-motivated course, submitted for approval, will however be considered.

It is suggested that for motivation purposes, recognition is given by means of a certificate awarded by the institution which presented the course.

The suggestions for the contents of such a course in tuberculosis is given in broad outlines only. Through curriculum planning a sensible course could be designed for every situation.

SUGGESTED SKILLS TO BE ACQUIRED

Knowledge skills

— General knowledge

definition
history
incidence
cost

— Basic knowledge

anatomy
physiology
microbiology
immunology
pharmacology

— Specific knowledge

predisposing factors
causative organism
reservoir
mode of transmission
carriers

— Disease knowledge

period of communicability
susceptibility and resistance
testing
pathogenesis
incubation period

— Clinical knowledge

clinical picture
complications
diagnosis
treatment

— Management knowledge

mangement of contacts
general and continuous control
measures

Pschomotor skills

observation skills
history taking skills
communication skills
skills in physical examination
diagnostic skills
health education skills
administrative skills

Affective skills

attitude towards health and illness
communicator credibility
personal motivation.

The reader will realise that the proposed course, presented on a basis of continuous education in the working situation, implies a lot of time and effort from both the student and the teacher. In today's circumstances, however, there is no place for half-measures. Every available nurse must be utilised to the utmost and with as little time lost as a result of ignorance as possible.

CONCLUSION

With everybody being trained in accordance to the health needs of their specific communities, and with excellent co-operation between the different health professionals, it is hoped that tuberculosis, together with a few other diseases, will be eradicated long before another centenary conference on Dr Robert Koch's discovery is held.

ANSWERS TO QUESTIONNAIRE ON TUBERCULOSIS

(Multiply correct answers by four (4) to obtain percentage (%))

- | | |
|---|---|
| 1. True | 11.1 True |
| 2. True | 11.2 False (if sputum is <i>positive</i>) |
| 3. True | 11.3 True |
| 4.1 False (3 weeks) | 12.1 True |
| 4.2 True | 12.2 False (sleeping within 5 metres) |
| 4.3 All True | 12.3 True |
| 5. False (BCG) | 13. False (active periodic follow-up) |
| 6. False (any age) | 14. False (only bacteriological diagnosis) |
| 7. True | 15. True |
| 8. False (Chloramphenicol not used in TB-treatment) | 16. False (not recommended) |
| 9. True | 17. False (not recommended) |
| 10. True | 18. False (must be given) |
| | 19. True |