

Health Care of Children

THE POTENTIAL ROLE OF THE PAEDIATRIC NURSE ASSOCIATE*

H. DE V. HEESE, J. D. IRELAND, D. M. McWILLIAMS

SUMMARY

It is estimated that at the present rate of population growth, at least 21,5 million children under the age of 14 years will require health care by the year 2000. With the available medical manpower, it is not possible to provide the present child population with the uniformly high standard of health care to which they are entitled. It is urged that Paediatric Nurse Associates be trained to assist in this regard. A preliminary report of the training scheme introduced for Paediatric Nurse Associates at the Red Cross War Memorial Children's Hospital is presented for discussion and criticism.

S. Afr. Med. J., 48, 1752 (1974).

Red Cross War Memorial Children's Hospital and Department of Paediatrics and Child Health, University of Cape Town

H. DE V. HEESE, M.D., B.SC., F.R.C.P., D.C.H.

J. D. IRELAND, M.B. CH.B., F.C.P. (S.A.)

D. M. McWILLIAMS, DIP. NURS., DIP. NURS. ADMIN.

*Based on a paper read at the Biennial Paediatric Congress of the South African Paediatric Association (MASA), held in Pretoria on 3-5 April 1974.

Over 40% of the population of the Republic of South Africa is under the age of 14 years. A further 8-10% in the adolescent age group falls under the provisions of the Children's Act. It is estimated that at the present rate of population growth, approximately 21,5 million children will require health care in South Africa by the year 2000.¹ It is believed that there will never be an adequate number of medical practitioners in South Africa to provide a comprehensive health service for children.

The Snyman Commission recommended the introduction of Health Assistants to promote health care.² It has also been advocated that suitable nurses should receive further training to enable them to act as health care sifters and to take over some of the less specialised duties of doctors under the direction of a doctor.³

In 1967, in the USA, Silver and co-workers⁴ designed the Paediatric Nurse Practitioner Programme to expand the role of the nurse by providing increased health care for children in paediatricians' offices and in various public health fields in urban and rural low income neighbourhoods. Parents have expressed a high degree of satisfaction with the services of such Paediatric Nurse Practitioners.⁵

It is recognised that for many years nurses in South Africa, for practical reasons, have had to act as 'Nurse

Practitioners'. Their contribution, especially to midwifery but also in other fields of medicine, both in urban and outlying areas or in mission hospitals, cannot be underestimated. Whether optimum use is made of their services and whether, by training, their contribution can be expanded, requires further consideration.

It seems to be desirable for nurses with an appropriate training and interest in children to take on a greater share in the promotion of improved and realistic health services for the very large paediatric population of the country.

During 1973, a pilot training scheme for nursing sisters with a paediatric-orientated background was offered at the Red Cross War Memorial Children's Hospital, to qualify them to care for children under delegated authority from a medical practitioner. Qualified nurses are to be designated as Paediatric Nurse Associates (Afrikaans: *Pediatriese Verpleeg Medewerksters*). This communication serves as a preliminary report of the training scheme, in the hope that it will stimulate thought and criticism of what is believed to be a development of the greatest importance to the future health care of children in South Africa. Many questions cannot be answered, such as her acceptance by patients and medical practitioners, her scope and limitations, and whether the training scheme under discussion will require medical revision in the future. It is, however, our firm belief that Paediatric Nurse Associates, in their own right as health workers and not as 'second-class' doctors, can make a significant contribution to the health care of children.

In planning the Paediatric Nurse Associate training programme, the following questions first had to be answered:

1. What will the function and role of the Paediatric Nurse Associate be in the health care of children and health services of South Africa?
2. What should her basic qualifications be to fulfil these functions?
3. How should the training programme be organised with reference to: (a) the curriculum; (b) method of instruction; and (c) assessment and examination of trainees?
4. What steps should be taken to prevent and overcome the inevitable prejudices by medical, nursing and administrative staff, and other difficulties which the Paediatric Nurse Associate may encounter in her practice after qualification?
5. Will the potential of Paediatric Nurse Associates be restricted by present legislation?

FUNCTION OF THE PAEDIATRIC NURSE ASSOCIATE

It is recognised that the functions and responsibilities of the Paediatric Nurse Associate in South Africa, with its vast distances, variable doctor/population ratios and medical facilities, differing economic status of communities, sociocultural differences in population groups, spectrum of children's diseases varying from those of highly developed countries to those of developing countries, will be determined by the circumstances under which the Paediatric Nurse Associate will be expected to practise.

Regardless, however, of the conditions under which she practises, her main task will be to define the problems of the patient, whether they be preventive or due to disease, undernutrition, developmental delay, handicap, social or psychological conditions. Her functions can be visualised as being in two main directions:

- A. Preventive health education and parent counselling, involving nutrition, immunisation, general child and adolescent care and detection of handicap, for example by developmental screening and by the evaluation of vision, speech and hearing. In this sphere, she should have a working knowledge of the Children's Act, adoption procedures, regulations regarding foster care and places of safety, family planning and the organisation of health centres.
- B. The identification and assessment of health problems or diseases of infants and children and their management under the delegated authority of a medical practitioner or a health authority. The management would depend on circumstances and may consist of: (i) emergency care or the institution of therapy when urgent; (ii) referral to a doctor or hospital; (iii) personal management, under standing orders of the medical authority concerned.

A sine qua non regarding these stated functions must be that the Paediatric Nurse Associate's standard of competence should inspire confidence at all times in the community she serves. She must also have the full confidence of the supervising medical practitioner or health authority.

BASIC QUALIFICATIONS OF THE PAEDIATRIC NURSE ASSOCIATE

If the Paediatric Nurse Associate is to fulfil her responsibilities meaningfully and her work is to be of an adequate standard, she should: (i) have personality characteristics necessary for the care of children and handling of their parents, such as compassion, a pleasant and friendly manner and the ability to communicate and inspire confidence; (ii) be resourceful and, if required, be able to work on her own, display initiative and accept leadership of health workers involved in the care of children; (iii) have a good knowledge of paediatrics and child health and be in possession of a Diploma in Paediatric Nursing or have had extensive practical paediatric experience before being accepted for advanced training; (iv) have successfully completed a training programme specifically aimed at providing her with necessary knowledge and skills, and assisting her to orientate herself in her new role and giving her the required degree of confidence to fulfil her functions.

TRAINING PROGRAMME

The Curriculum

In working out the curriculum, it was felt that the cardinal aim should be to enable the Paediatric Nurse Associate to recognise and assess the problems of the patient. In this respect, it was easier to visualise how in-

struction should take place under functions relating to A, i.e. preventive health education, etc., than to those under B, i.e. the identification and assessment of health problems or diseases of children. With the latter, the Paediatric Nurse Associate will need good theoretical knowledge, be able to take a history and conduct a physical examination at a level which will enable her to recognise the problems of the patient. The Weed Problem Orientated Record System⁶ assists in the identification of problems, and it is regarded as a very suitable method for recording history and physical findings by Paediatric Nurse Associates. It was therefore decided to train these nurses to think along these lines from the start.

To further define the problems of the patient and to supply long-distance information to a doctor where necessary, the nurse will need the ability to carry out and interpret side-room investigations, e.g. haemoglobin, ESR, urine and stool examinations. All aspects of her training should enable her to assess the patient's problem and to make a decision as to whether she can handle the problem herself or whether the patient requires urgent or non-urgent referral to a doctor or hospital. In cases of urgency, she should be qualified to apply certain necessary emergency treatment before the patient is taken to a medical practitioner, hospital or clinic.

In certain situations, the supervising medical practitioner may advise her to continue management of a patient. Medical supervision by telephone may be close or long-distance. The nurse should, therefore, be able to undertake initial therapy as required, e.g. the administration of intravenous fluids or therapeutic agents, collect samples and specimens, including lumbar puncture, and make recordings such as ECGs, etc. She may also be requested by authority to carry out functions similar to those of a doctor in a ward.

She may be required to act as leader of a health team, supervise health education, carry out medical inspection of schoolchildren and be responsible for some of the functions which at present would normally be carried out by a medical practitioner. This would allow the medical practitioner more time to apply his knowledge to special problems and functions.

With the foregoing in mind, the following guidelines were set when working out the details of the curriculum:

1. The Paediatric Nurse Associate should be trained to the level expected from medical graduates during their Senior House Officer appointments in the Department of Paediatrics and Child Health in the following: (a) history-taking; (b) systematic physical examination; (c) normal physical, intellectual, emotional and social development; (d) methods for assessing the health status of the child, e.g. the use of growth charts for height, weight and skull circumference; (e) feeding and the essentials of nutrition; (f) principles and methods of health education.

2. The Paediatric Nurse Associate should know the symptoms and physical signs which would enable her to recognise a disorder of a particular body system. The following serve as examples:

Symptoms, e.g. that wheezing is associated with obstruction of air flow in the bronchial tree, mainly during expiration. This symptom will enable her to identify the system involved.

Physical signs, e.g. the recognition that a murmur of the heart is present on auscultation. This should alert her that the cardiovascular system may be involved and that she should refer the case for further opinion. The emphasis in this instance is that she should recognise a murmur but not necessarily identify its significance or method of production.

Warning signs and symptoms indicative of an urgent or emergency situation, e.g. full fontanelle and stiff neck in meningitis; oedema, oliguria and hypertension in acute glomerulonephritis; stridor and laryngeal obstruction in laryngotracheobronchitis, combined with the signs of respiratory failure.

3. She should also have a knowledge of and be able to recognise: (a) common and important diseases in children, common forms of presentation and physical signs usually associated with them and complications to look out for; (b) everyday problems, including teething, enuresis, feeding difficulties, unhealthy parent-child relationships.

4. It is also important for her to know: (a) the structure of preventive health services; (b) the ethics of medical and nursing practice; (c) the essentials of the Children's Act and the laws relating to child abuse; and (d) how to manage the dying child and his family.

5. Expertise with procedures of the same standard required from Senior House Officers in the Department of Paediatrics and Child Health would be necessary for: intravenous therapy, intubation, suturing of cuts, and the collection of blood samples.

6. 'Core' knowledge of the principles involved in the management of emergencies and their application, e.g. anaphylactoid reaction; drowning; shock following blood loss; respiratory and cardiac arrest; poisoning; burns; foreign bodies; fractures and injuries; and snake bite.

METHOD OF INSTRUCTION

For many reasons it was not possible to organise a course for Paediatric Nurse Associates lasting longer than 4 months at the Red Cross War Memorial Children's Hospital. To achieve the objectives of the training programme required consideration of many different ideas when planning the course.

It was decided not to use a Sister Tutor but to centre all training on one interested paediatrician who was to act as tutor, confidant and adviser. One of the authors (J.D.I.) performed this task and since the training programme was full-time and time-consuming, arrangements were made to enable him to make this his main duty.

In planning the course and methods of instruction, certain assumptions had to be made, which were largely based on experience and observation.

It can reasonably be expected that sisters who have successfully completed their Paediatric Nursing Diploma have an adequate theoretical background of paediatric knowledge. In practice, however, it was found that nursing sisters with this qualification, when confronted with a sick child, sometimes have difficulty in applying their theoretical knowledge to the actual situation. This is probably due to the system in which the nursing sister is involved with nursing the child, while the recognition of the problems, the

diagnosis, assessment of severity, investigation and treatment are left to the medical practitioner. It is also a truism that theoretical knowledge, if not applied to an actual clinical situation, is quickly forgotten.

To equip the future Paediatric Nurse Associate with the necessary knowledge, a series of lectures with emphasis on 'core knowledge' must be included in her training programme. She must learn to relate this to patient problems and must supplement it by attendance at clinical meetings and courses in health education.

In the lectures, emphasis must be placed on the recognition of what is normal; the usual presentation, recognition and interpretation of symptoms and signs associated with a particular system; danger symptoms and signs; recognition of the case which should be referred, either urgently or electively; applied knowledge of health education and other important matters, such as the Children's Act.

The ultimate success of the Paediatric Nurse Associate teaching programme will depend not only on her theoretical knowledge, but on her ability to handle children and their parents, and to recognise and interpret normal and abnormal physical signs. She must also be able to carry out procedures and be able to communicate with parents, medical, nursing, paramedical and administrative personnel in a confident and competent manner. During the training programme, she should constantly be exposed to ideas and situations designed to stimulate the development of these attributes.

The following might be a typical day: after an hour-long paediatric clinical meeting, the cases or conditions presented are discussed for half an hour. Thereafter, 2 lectures are given, each lasting an hour, on important subjects, with emphasis on core knowledge and the practical aspects and complications of the disorders under discussion. After tea, the candidates spend half an hour examining sick children in the wards or the Outpatient Department. The cases are then presented to the tutor and the diagnosis, including aetiology, pathology, complications and management, are discussed. Students also receive tuition in practical procedure, such as intravenous infusions, and the taking of blood specimens. During the afternoon more lectures are given or special clinics are attended.

The main emphasis is on keeping the candidates busy, especially with the practical aspects of clinical medicine. Despite this, it was found that time set aside for additional reading was never wasted. This probably reflected the enthusiasm and eagerness of the candidates, who had been hand-picked for the course.

Assessment and Examination for Paediatric Nurse Associates

The assessment of the trainees takes place at the end of the 4-month training period and is carried out by at least 4 examiners with experience in different fields. The tutor responsible for the programme is not an examiner but can attend as an observer. This latter procedure ensures that the assessment is completely objective. The examination includes the following:

A 3-hour multiple choice question paper, consisting of 150 multiple choice questions, with clinical distribution:

| | | |
|--|---|-----|
| Fetal and neonatal period | } | 20% |
| Normal development | | |
| Nutrition and gastro-intestinal system | | 15% |
| Respiratory system and allergy | | 10% |
| Infectious diseases/immunisation | | 10% |
| Drugs and poisoning | | 10% |
| Cardiovascular system | } | 20% |
| Central nervous system | | |
| Genito-urinary system | | |
| Haematology | | |
| Endocrinology | | |
| Adoption | } | 5% |
| Children's Act | | |
| Child abuse | | |
| Miscellaneous | | 10% |

The multiple choice questions are of the same standard employed for the national Multiple Choice Question Paper in Paediatrics and Child Health for the final examination of medical students. However, the questions cover only those subjects applicable to the function of the Paediatric Nurse Associate.

The clinical examination consists of two parts: *Long case*: The Nurse Associate is given 45 minutes with a mother and child to take a full history and carry out a physical examination. She then spends 30 minutes with the 4 examiners and is expected to present an assessment of the problem with a diagnosis and suggested management. She is then examined on all aspects of the case.

Three to four short cases: The candidate spends 20 minutes with 2 examiners who assess her ability to recognise and interpret physical signs, both normal and abnormal. Three to 4 cases with physical signs indicative of different systems involvement are shown.

Oral examination. The candidate is questioned for 20-30 minutes by 4 examiners on any aspect of health care for children relevant to her future work. She is examined on clinical matters; management of problems, with emphasis on broad aspects of nursing; general health care, including family dynamics; the Children's Act; adoption; learning disabilities; and other relevant questions, including difficulties experienced and attitudes of other nursing and medical staff to a Paediatric Nurse Associate in a health team.

Marking system. The candidate is expected to pass in all the above entities, the greatest importance being attached to the clinical examination.

A simple system of marking is employed, the standard symbol being *S*. *S* signifies a satisfactory performance and is accepted as the standard. It is equivalent to 60-64% in the figure system; *S-* signifies a compensatable fail (equivalent to the usual 55-59%); *S+* signifies an above-satisfactory performance (65-70%). This symbol is of value in that it can compensate for an *S-* elsewhere obtained. *F* signifies a clear fail (54% and below). *X* signifies an exceptional performance (above 71%).

In the written paper a candidate obtains a mark which is also reflected as a symbol. Should the trainee achieve 4 *X*s, the Multiple Choice Question Paper, Long and Short

Clinical Cases and the Oral, she would obtain a pass with honours.

Clinical Attachment

After successful completion of the examination the Paediatric Nurse Associates are required to practise their new role at the Red Cross War Memorial Children's Hospital and the Day Hospitals Organisation for a 4-month period to further develop their skills along 'internship' lines, as for newly-qualified medical practitioners. They are required to manage patients along the lines described, and although they will work under and with different practitioners, their tutor will still follow their progress and act as adviser.

During an 8-week period they are expected to attend clinical meetings and a series of 32 seminars for 4th-year medical students in the paediatric and child health block. At the end of this period they are assessed and a certificate of competence is issued.

PROBLEMS ANTICIPATED

During the planning phase of the pilot training scheme it was recognised that the first Paediatric Nurse Associates would have to overcome inevitable prejudices from medical, nursing and administrative staff. These difficulties are likely to be encountered, especially in a relatively well-staffed teaching hospital, where medical staff may feel that medical standards are being lowered. In other situations medical practitioners may well feel threatened by a competent Paediatric Nurse Associate. The reaction of both senior and junior nursing staff to a nurse in such a new role also cannot be predicted.

Although these difficulties are unlikely to arise in sparsely staffed areas, where there is a need for Paediatric Nurse Associates, the first graduates will probably stay in the Cape Town area for personal reasons. To assist them in their new role, in group discussions during the course, the tutor fully discussed possible difficulties which the Paediatric Nurse Associates might encounter and how to handle them.

DISCUSSION

There is an urgent need for improved health care of children in South Africa. It must be accepted that health services for children whose parents can pay for medical services are superior to those for lower socio-economic groups. Although excellent and ever-improving services for the latter group are available in some urban areas, the position is less satisfactory in many parts of the country. The reasons are multifactorial and have to be solved at many levels.

Three essentials for the improvement of the health of children, the country's future citizens, can be tackled immediately:

1. Vigorous and imaginative programmes to promote the acceptance of population control — the key

factor in the acceleration of efforts aimed at the relief of poverty, improved living standards and, most important of all, the health of children.

2. The training of midwives and Paediatric Nurse Associates with knowledge and expertise of a high standard, but below that of a medical practitioner. Midwives are specifically referred to because the health of the mother during pregnancy and the management of labour and delivery may have a profound effect on the child.
3. Training of health educators.

Political pressure and adverse comment from outside and within South Africa regarding family planning for the lower socio-economic groups (of all races) and training schemes for health workers should not be allowed to influence legislators and health planners. Derogatory references to 'second-class doctors' and 'second-class health care' indicate a complete lack of insight and interest in, and a callous disregard for the health needs of nearly 9 million children in South Africa.

The valuable role of allied paediatric health professions, the Paediatric Nurse Practitioners and Child Health Associates in the health care of children belonging to all socio-economic groups in North America have been confirmed. There is a far greater need for this type of health worker in South Africa than in North America. For this reason, the pilot training scheme for Paediatric Nurse Associates was commenced at the Red Cross War Memorial Children's Hospital. This neutral name was chosen since the words 'Practitioner', 'Assistant' and 'Auxiliary' all carry certain connotations within existing medical services.

The success or failure of a Paediatric Nurse Associate in a hospital, day hospital, clinic or rural setting, will depend on whether she can significantly contribute, directly or indirectly, to improvement in the health of children. Directly, by taking over a large share of primary health care duties, and indirectly, by relieving the doctor of some of his duties and allowing him to apply his skills more economically to the benefit of patients who require them. In outlying areas, the medical care offered by the Paediatric Nurse Associate may be the only health care immediately available.

The standard of training of the Paediatric Nurse Associate must be sufficiently high to enjoy the complete confidence of the public and the supervising medical practitioner or health authority. An insufficiently trained Paediatric Nurse Associate will be unable to provide the service envisaged, and if her work has to be cross-checked at all levels, it will only double the work of the supervising medical practitioner.

In our opinion, it will be extremely difficult, if not impossible, to train a nursing sister to the standard necessary for the care of the children in the whole spectrum of disease with which a general medical practitioner has to deal. It is, therefore, advocated that Nurse Associates receive training in specific clinical fields, e.g. paediatrics and child health; obstetrics and gynaecology; medicine; geriatrics; psychiatry, etc. They have to be 'specialists' in the needs of certain age groups or categories of patients. In this manner, they can form a group or team serving a specific community under the over-all direction of a medi-

cal practitioner. To expect the individual Associate to practise too widely will make her a Jack of all trades but master of none, will lower medical standards and result in a loss of confidence by medical practitioners and patients in her competence. In this context, the whole concept of the traditional roles of the district nurse, the midwife and the community nurse requires re-evaluation.

If a sufficiently high standard of competence is to be attained in the relatively short period of 4 months of intensive training, and 4 months of 'internship', during which the Nurse Associate has to acquire new skills, re-orientate her thoughts on her new role and acquire a certain amount of new knowledge, teaching methods become vitally important. The combination of a tutorial and an apprentice system has stood the test of time in many disciplines. Experience in the present training programme has again shown the advantage of having one tutor with not more than 5 apprentices.

It may be argued that it is uneconomical to use a highly specialised paediatrician practically full-time to train nurses in this manner. Present experience in the pilot study suggests that it is fully justified and probably a sound long-term investment. It is our belief that instruction cannot be given by sister tutors or by a series of medical lecturers. It is, however, recognised that there is an urgent need for a large number of Paediatric Nurse Associates, and training schemes may have to be changed accordingly. The need for one tutor with adequate time to teach, co-ordinate the course and assist individual trainees with problems will, however, remain.

One of the rewarding aspects of the course was the enthusiasm with which the teaching, both theoretical and practical, was received by the candidates. Other aspects which became evident was that qualified sisters, either with the Paediatric Diploma or with extensive paediatric experience only, had during their training been given a wealth of theoretical knowledge which had not been fully assimilated, and many important practical aspects were lost because these aspects had not been experienced or reinforced in the 'front line' of clinical practice.

The aims were thus to cover and review many of these aspects and to get the candidates to accept more responsibility than they had previously undertaken. This they managed well. A happy balance, however, had to be struck between previous inhibition and newly acquired over-confidence.

The clinical approach to the child was easily coped with since all the candidates were well versed in children's actions and behaviour patterns, as well as being experienced in handling children. This aspect often has a marked inhibitory effect on medical students and housemen. The Associates enjoyed the insight they now had into a child's condition and felt that for the first time they were treating the child as a whole, understanding the problem in its entirety and not attending only the nursing aspect. This fact, most likely, reflects the usual poor communication between nursing staff and medical personnel during ward rounds or in handling patients.

The general consensus of opinion of the candidates was that they had benefited tremendously from the course and they were keen to fulfil their new roles in the health team

serving the community. The prospects were not only exciting in themselves, but the knowledge that the care of children would be improved was a rewarding and satisfying one.

Three of the examiners had extensive experience of medical under- and postgraduate examinations. The other 3 were experienced in various fields relevant to the envisaged future work of Paediatric Nurse Associates. Symbols were used as for final-year medical students and the examiners' results were remarkably consistent. It must be stressed that the results obtained by the Paediatric Nurse Associates are not to be equated with those of final-year medical students, as the former were tested in a more restricted field.

The final results for the 5 candidates were as follows:

| <i>Multiple choice questions</i> | <i>Long case</i> | <i>Short cases</i> | <i>Oral</i> |
|----------------------------------|------------------|--------------------|-------------|
| 60% | S+ | S | S+ |
| 67% | S+ | S | S+ |
| 65% | X | S+ | X |
| 76% | S+ | S | S+ |
| 67% | X | S- | X |

It is of interest that the results in the long cases and orals were outstanding. The identification and interpretation of physical signs in the short cases were not of the same high standard. None of the candidates, however, missed any of the physical signs, but they were not always able to interpret the sign correctly, e.g. identification of the correct valve involved in producing a murmur; but they were not, in fact, expected to have this skill.

In interpreting these good results, it must be remembered that the 5 sisters were all invited and, therefore, specially selected. It is doubtful whether this high standard will be maintained. The examiners were of the opinion that the candidates showed the correct attitude towards their future work. The Nurse Associates are at present doing their 'internship' and their progress is being closely watched.

It is too early to comment on the difficulties which these Nurse Associates have experienced since the completion of their course. Most of the problems have been those anticipated and were easily overcome, perhaps because they had been prepared for them during their period of instruction.

Questions have been raised about the medicolegal aspects of the work of Paediatric Nurse Associates in South Africa. We agree with Silver⁷ that the health worker, the health profession and the public all require protection by legislation. It would seem that present legislation under the Medical, Dental and Pharmacy, and the Nursing Acts covers to a large extent the functions, under standing orders of a medical authority or a medical practitioner, envisaged for Paediatric Nurse Associates regarding: (i) the carrying out of diagnostic and therapeutic procedures; (ii) institution of emergency care and therapy; and (iii) personal management and treatment of diseases.

The following relevant facts require consideration by the appropriate authorities. In terms of section 34(1) of the Medical, Dental and Pharmacy Act, 1928 (Act 13 of 1928):

'Any person not registered as a medical practitioner who, for gain performs an act pertaining to the calling of a medical practitioner shall be guilty of an offence'

'A registered nurse shall carry out such *therapeutic* [*sic*] activities as his knowledge and proficiency permits, under the direct or indirect supervision of a medical practitioner or a dentist or on his written or verbal prescription. Nursing care which does not require a medical practitioner or dentist prescription shall be carried out in accordance with the total therapeutic programme.' (Note (iii) of the Nursing Regulations.)

'A registered health assistant shall not (C) make an independent diagnosis or treat a case therapeutically on his own'. (Government Notice No. 4201, R337 of 8 March 1974).'

Definition and use of the words 'therapeutic' and 'diagnosis' seem to suggest that the Nursing Regulations exclude diagnosis from the authorised functions of a nurse. Clarity in this regard must be established in the interests of the nurse and all concerned. This can probably be best achieved by deleting the word 'therapeutic' from the Note (iii) of the Nursing Regulations. However, it is quite clear that the actions of nurses in this regard are the responsibility of the medical practitioner under whose supervision such activity is performed.

All activities relevant to the work of the Paediatric Nurse Associate, including Advertising, Breach of Contract, Professional Reputation of Registered and Enrolled Persons, Professional Secrecy, etc. are clearly defined by the Nursing Act.

As in the case of medical practitioners, it is imperative that all health workers, including Paediatric Nurse Associates, carry medicolegal protection.

Further aspects regarding Paediatric Nurse Associates which will require consideration by appropriate authorities can only be mentioned. To attract and train suitable

nurses for such positions, they will have to receive financial recognition commensurate with their enhanced status once they are qualified. We also urge that adequate provision be made for the continuing education of Paediatric Nurse Associates.

CONCLUSION

The pilot programme for the training of Paediatric Nurse Associates at the Red Cross War Memorial Children's Hospital, and assessment of examination results, proved to be satisfactory. The success of the scheme can, however, only be fully assessed once they have worked under different conditions for varying periods. The reactions of medical staff, nursing staff, paramedical and administrative staff also need to be noted, in view of the fact that the Red Cross War Memorial Children's Hospital is a relatively well-staffed hospital, with emphasis on high standards of medical care expected in a teaching hospital. It can, therefore, be anticipated that the Paediatric Nurse Associate will not be able to develop her full potential in this environment. Only when Paediatric Nurse Associates work in medically understaffed areas, will it be possible to evaluate the present curriculum and pilot training scheme.

REFERENCES

1. Department of Census (1970): *Census Report*. Pretoria: Government Printer.
2. Commission of Inquiry into the High Cost of Medical Services and Medicine under the Chairmanship of Professor H. W. Snyman (1962): *Report*. Pretoria: Government Printer.
3. Searle, C. (1973): *S. Afr. Med. J.*, **47**, 509.
4. Silver, H. K., Ford, L. C. and Stearly, S. C. (1967): *Paediatrics*, **39**, 756.
5. Day, L. R., Egli, R. and Silver, H. K. (1970): *Amer. J. Dis. Child.*, **119**, 204.
6. Weed, L. L. (1969): *Medical Records, Medical Education and Patient Care*. Chicago: Year Book Medical Publishers (Cape Western Reserve University Press).
7. Silver, H. K. (1971): *New Engl. J. Med.*, **284**, 304.