

ARTICLE II

THE PAEDIATRIC PRIMARY CARE CLINICAL NURSE IN SOUTH AFRICA — AT THE CROSSROADS OF PROGRESS

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EXTENDING the role of the nurse particularly into areas previously considered to fall under the direct jurisdiction of the medical doctor, is a subject that usually generates a great deal of emotion and division of opinion. The following points should be read and accepted. If not fully accepted, they should be given

serious consideration.

1. Medical care services in South Africa range from extremely good in some areas to extremely poor in others.
2. Adequate medical care of the population, and especially the lower socio-economic groups, is **never**

going to be provided through doctors alone.

3. The gap between the ideal doctor to population ratio is widening and is unlikely to close in the foreseeable future because of the rapid population growth still occurring. The tendency to specialise, the emigration of doctors and the maldistribution of those remaining are additional contributing factors.
4. For primary health care to have a measurable effect it must reach a high percentage of the population.
5. the only means of filling the hiatus is through other forms of health personnel.
6. In South Africa the person most suited to fill this new role as far as children are concerned is the state registered nurse.
7. In many situations because of insufficient doctors state registered nurses are already, by force of circumstance, undertaking duties far beyond the scope of their original training.
8. With appropriate training the clinical nurse can effectively take over many of the traditional duties of the doctor.
9. Human nature is such that we usually learn through our own peoples' mistakes rather than accepting other peoples' experience. There is an abundance of literature now available regarding the various roles the clinical nurse can undertake in various situations and settings — almost all of it favourable!
10. The traditional division of health care into separate compartments of curative and preventive is outdated. The major need of most communities in a developing country is a system based on primary health care in which the curative and preventive services are totally integrated and available at the same time and place.

In 1973 it was evident to us that the future needs of the countries' medical care delivery system could not be provided through doctors alone. A programme was thus set in motion to train suitably qualified and selected nursing sisters in an advanced course. This course incorporated many aspects of clinical skills and therapy usually provided by doctors. There were many answers to be found to various questions regarding:-

- a) her function in the health care of children
- b) her ability to cope with her new role, both clinically and ethically
- c) what resistance and prejudice would occur concerning nursing, paramedical and medical staff
- d) how effective could such a training course be
- e) if effective, how could appropriate recognition occur with the necessary legislation changes so as to allow wide-scale application of this concept.

What was done?

Initial experience with the training and development of the course is fully described in previous articles(1,2). We have now had six years' experience in training and assessing the efficiency of the Advanced Paediatric Clinical Nurse (A.P.C.N.), in a variety of work situations.

The course consists of six months of lectures, audiovisual, clinical and tutorial training by a small number of paediatricians interested in this concept with

one basic paediatric tutor. This approach, though tending to be didactic, does eliminate confusion, because a lot of new knowledge and skills have to be learnt in a relatively short time. The candidates are selected from applicants who already have adequate experience in paediatrics or the Paediatric Nursing Diploma. Numbers are limited to a maximum of six candidates and clinical skills are acquired by intensive personal tuition using the well-tried bedside tutorial system.

At the end of the initial six-months training, where emphasis is on the acquisition of knowledge and clinical skills, a formal examination is set. This consists of multiple choice papers, clinical examinations and orals. The standard is that expected of final year medical students in those areas of paediatrics and child health covered in the course. Having passed this the candidate then undergoes a further six months 'internship' where experience and confidence are gained in her new skills.

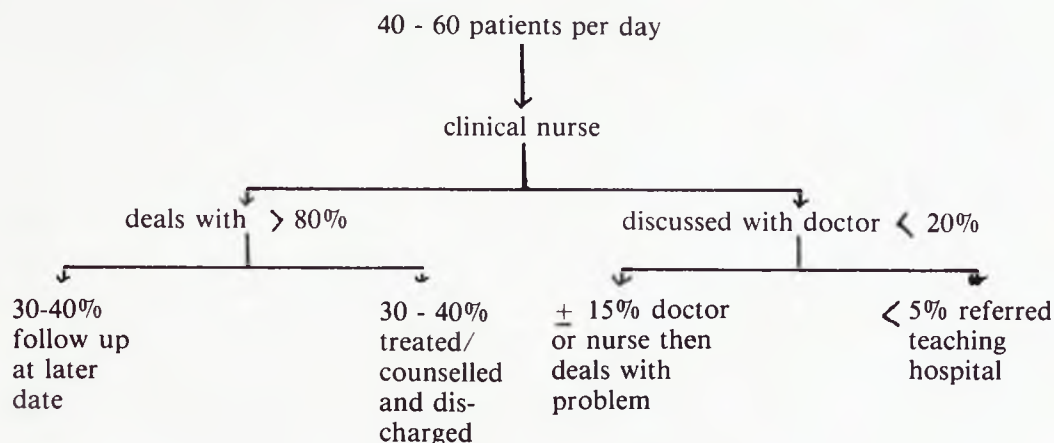
During this period she works with other clinical nurses and under close medical supervision. A Red Cross War Memorial Children's Hospital (R.C.W.M.C.H.) Diploma is then issued on satisfactory completion of the second period.

Where has she worked and with what results?

She has shown herself to be extremely effective in a wide variety of situations. Twenty candidates have passed the course and many have returned to other centres in this country or to other countries. They have applied their knowledge and skills to the problem areas in their particular work situations and a wide range of benefit is being achieved. In and around Cape Town, where the majority are practising, they have worked in the following areas:-

1. **The Drip Room at R.C.W.M.C.H.** Here she functions firstly in a clinical capacity, admitting patients, taking full histories, doing examinations and sending off the appropriate investigations. The fluid requirements and medical therapy are determined by her as well as interpreting results, correcting metabolic upsets and doing assessment rounds every few hours. In addition to these duties she also plays a very important role in health education as regards infant feeding, bottle hygiene, personal hygiene and many other problems that so often occur in the socio-economic group that require admission to our Drip Room. Having clinical nurses work in addition to medical staff has resulted in a marked decrease in iatrogenic complications such as over-or underhydration etc. There has been a steady fall in mortality figures over the past five years which is partly attributed to their effectiveness.
2. **The Day Hospital Organisation.** Here she functions effectively clinically working under the supervision of a doctor. She sees paediatric out-patients and takes full histories and examines and treats the patient. The prescription is written up by the doctor she is working with. This requirement has been a major hindrance for both parties. Work load is depicted in Figure 1.

Fig. 1



If possible the number of patients seen by the clinical nurse should be curtailed to thirty per day. This enables her to provide a comprehensive care service. Emphasis during training is laid on the fact that her role not only includes that of history-taking, assessment and treatment of the disease process or problem with which the child presented but also entails those other aspects of care so often overlooked in a busy out-patient department setting. These include developmental screening, early detection of other abnormalities or handicaps, problems related to growth, vital senses and nutrition. In addition she gives advice regarding infant feeding, immunisation, family planning and social problems as required. In this extended role, indefinable benefit is achieved on a wide variety of fronts encompassing the entire patient and his family rather than just the acute problems with which he presented. Having A.P.C.N's. working in this way relieves the doctors of a large amount of the routine workload so as to enable them to devote more time and expertise to the more major problems.

3. **A Provincial country hospital.** Here, as the sister in charge of the ward where the medical cover is often through busy general practitioners, the clinical nurse has shown herself to be invaluable. Continuity of care with early detection of complications and appropriate referral has been the outcome.
4. **Running an in-patient intractible diarrhoea ward in R.C.W.M.C.H.** Working under the supervision of a medical registrar, the clinical nurse has been a success in running this ward where complicated feeding, investigation and treatment protocols have been accurately and effectively followed.
5. She has proven herself capable of handling many other situations such as covering a paediatric general ward when the houseman was off ill or examining children and advising on problems found at an orphanage which she was visiting on a regular basis as part of her rotation. She also functioned very effectively

in our Haematology department where she ran the Neonatal Jaundice Unit, Haemophiliac Unit and gave cytotoxic under supervision. She was well accepted by parents, patients and staff in all these situations.

It is not intended that the roles described above are necessarily the areas that she should cover or fill in the future. In our particular situation in R.C.W.M.C.H. she will still prove herself in the areas where numbers of patients and severity of illness requires additional expert personnel, such as our Drip Room and certain areas of out-patients. The areas where she has functioned have been a means to assess ability to cope with various situations so that we could see what problems would occur and they therefore acted mainly as testing grounds.

What has been achieved?

Firstly many problems initially envisaged have been overcome or did not arise. These are:-

1. Level of competence and ability
2. Integrity with adaptation to her new role
3. Patient and general acceptance
4. Whether the cost and effort was warranted
5. Development of shorter, more basic course.

Competence and Ability

A high degree of both has been achieved and she has been found to apply her knowledge and expertise well in the various situations. The candidates were specifically selected for this particular course and this might well have contributed to our good results as regards success in the examination. The examination was conducted by experienced examiners including the Professor and Head of the Department of Paediatrics and Child Health. The examiners' general consensus of opinion regarding ability has been extremely favourable.

Adaptation/Integrity

Because the candidates were already well versed in childrens' actions and behaviour patterns, no problem has been encountered with her adaptation to the handling of children and parents as a rule. At the end of the initial six-months training they have the basics of clinical skills and a wide theoretical back-up knowledge. It is only after the next six months of 'internship' that full confidence and the ability to put pathological conditions in perspective occurs. The training programme was developed to have a clinical nurse with the ability not only in curative aspects of clinical care, but especially to include preventive and promotive care.

Very few problems have been found in her adapting to her new role or her professional integrity. To accept more responsibility than they had previously undertaken was readily coped with and a happy balance was struck between shaking off previous inhibitions and not becoming overconfident.

Acceptance

A pleasant surprise awaited us as regards the degree of patient acceptance which has occurred. In most cases where A.P.C.N's. have started functioning at different hospitals or clinics paediatric numbers have increased. Disappointment has been voiced on the part of the patients' parents when a particular clinical nurse has moved on as part of the rotation system. A mother cannot readily be misled and she is soon aware of what degree of concern the A.P.C.N. is showing regarding the welfare of her child. If genuine and she is satisfied with the good service being provided then no problems with regard to patient or parental acceptance of the A.P.C.N. occur.

Cost and Effort warranted

It may be argued that it is uneconomical to use a highly specialised paediatrician practically full time to train A.P.C.N's. in this manner. Present experience suggests that not only is it fully justified but is also a sound long-term investment. Judged on our experience, we feel that clinical instruction should not be given by sister tutors or by a series of different medical lecturers. It is however recognised that there is an urgent need to train a large number of A.P.C.N's and that training systems may have to be changed according to availability of teaching staff and facilities. The need for one basic tutor with adequate time to teach, co-ordinate the course and assist individual trainees with problems, will however remain.

The conclusion we have come to is that the time, effort and cost are most certainly warranted. When widespread application of this concept does occur, the ultimate benefits will be almost incalculable. Our local benefits in their own right have been such as to make the pilot course most rewarding.

SHORT BASIC COURSE FOR THE PAEDIATRIC PRIMARY CARE CLINICAL NURSE (P.P.C.C.N.)

The A.P.C.N. is a highly trained and efficient end product but unfortunately costly, and because of the

level of training and time required, insufficient numbers of clinical nurses to meet the need can be trained to this level through the various teaching institutions. For the numbers required to have widespread application throughout the country, a more basic and shorter type of training is envisaged. In Rhodesia³ and Johannesburg⁴ much experience has been gained in this regard.

In April of this year we ran an experimental one-month course at the Cecilia Makiwane Hospital in the Ciskei. This course was under the auspices of the College of Medicine of South Africa. The four tutors, three paediatricians and one clinical nurse each went up to the hospital for a one-week period to cover a particular prescribed aspect of the course. The candidates, of whom there were six, were exposed to an intensive learning experience over a four-week period with lectures and bedside teaching occurring on a personal basis 8 hours a day. At the end of this an examination was set consisting of a paper requiring short answers, a clinical exam involving the examination and presentation of findings on long and short cases, followed by an oral exam. This was conducted by the Professor and Head of the Department of Paediatrics and Child Health of the University of Cape Town and one of the tutors. Levels of competence and ability achieved were extremely good and would surprise even the most ardent disbeliever. The effect of these basically trained clinical nurses will again be assessed in six months time.

At present as judged by telephonic communication with the paediatrician who works in association with them, there has been nothing but praise. These nurses are being called Paediatric Primary Care Clinical Nurses (P.P.C.C.N.) at present.

While it will be impossible for a team such as ours to provide this service on a widespread basis, what may well be possible is that the basic course could be provided complete in note form. All the particular lectures and diagrams and perhaps even slides covering the various subjects could be provided. By this means training can then occur using the personnel available in different situations and taking a longer period of time to complete the course if necessary, depending on staff availability. In many areas if sisters are taken out of their work situation then the services they provided cease forthwith because there is insufficient staff to provide adequate cover.

It would be a big advantage if this basic course could be the product of a combination of the courses being run at various centres, especially to incorporate the experience of other pioneers in this field such as Prof. J. Axton in Rhodesia and Prof. L. Wagstaff in Johannesburg. This could provide the basis for a definition of standards to occur so that maintenance of these set standards for this group of nurses will ensure their efficiency and ongoing acceptance. It is envisaged that many centres could train nurses to this more basic level so as to provide expanded services at the community health centres, peripheral clinics or mobile clinics. Problems beyond their scope could then be referred to the local district hospitals where in turn the staff complement should include an A.P.C.N. who could deal with the majority of these referrals. In turn a small percentage will be referred for medical assessment to doctors who can then devote time to the major problems rather than

being swamped by routine cases not requiring their additional skills.

It is important that the majority of P.P.C.C.N's. be trained in the work situation, in the area where they are most needed. The experience of workers in this field has been that if nurses are sent from a more rural area to a large urban hospital for training then many of them do not wish to return to the area they came from after completion of the course. Local training thus circumvents this additional problem. This now brings me to the reasons why widespread application of this concept has not so far occurred. This is directly related to:-

Problems Remaining

1. Official Recognition
2. Prescribing / issuing of medications
3. Definition of various grades
4. Posts
5. Other legal problems
6. Medical / nursing prejudice
7. Salary scales

Official Recognition

We are at present awaiting official recognition of the A.P.C.N. course by the South African Nursing Council. Until such time as official recognition of this course occurs little is going to be achieved beyond the experimental basis. We cannot continue training nurses in this regard if they are not going to have official recognition. In turn appropriate changes in legislation will be required to be made by the authorities concerned.

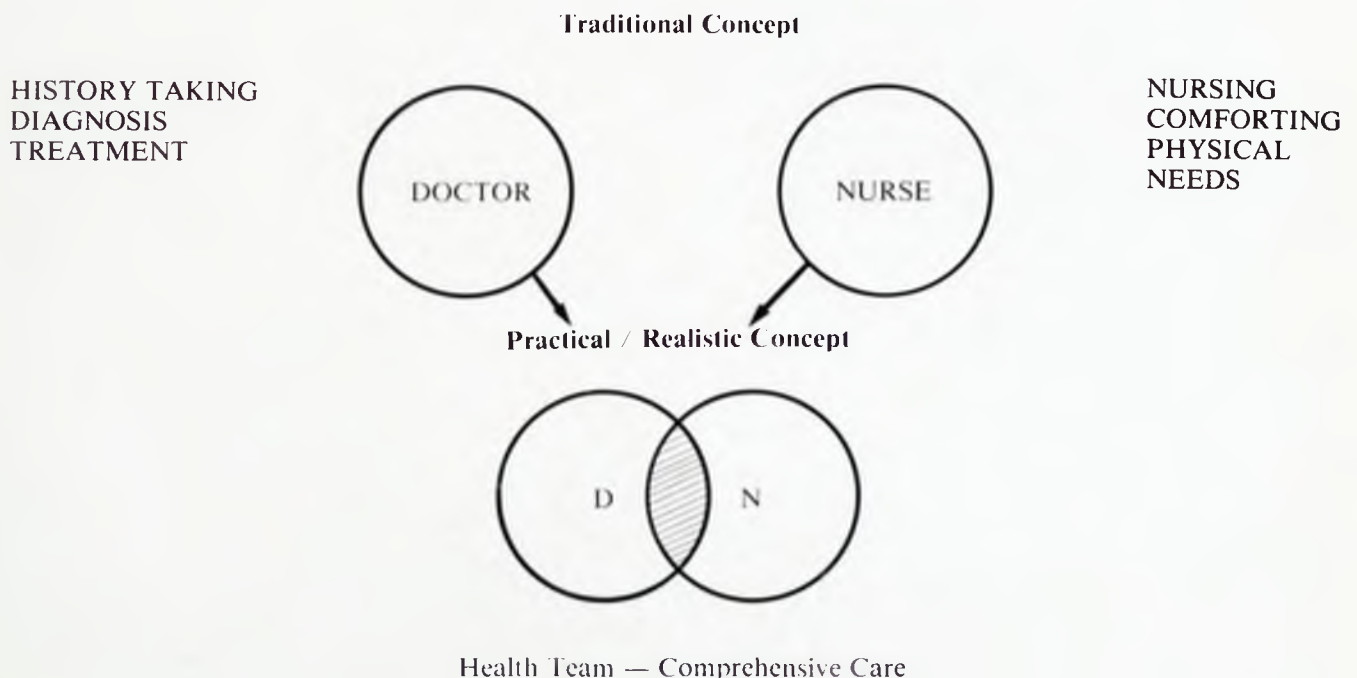
Changes in legislation as regards the major problems such as diagnosing, treating and prescribing can only come about once the levels of training for the A.P.C.N. are defined by the South African Nursing Council.

Prescribing

In certain situations, especially rural, many sisters without any additional background training except that gained with experience are in fact carrying out therapeutic regimens on patients. These treatment protocols often include potentially dangerous drugs. Treatment is often being given at the discretion of a sister who is carrying out such therapeutic practice without adequate legal or medical cover. We have to be realistic about the situation as it exists and accept the fact that both curative and promotive care is being done by sisters who at present are inadequately trained. This service will have to continue in the future but the additional training required will first have to be provided. To be effective, they must be able to prescribe or dispense set medicines. The number of medications which will be required are small with only a few being schedule problems.

These could be strictly defined and controlled with appropriate changes in legislation as has been the case in certain states in America. Without this additional therapeutic aspect of their function what can be achieved through their services is so much less. This function of therapeutic intervention often causes the purists to proclaim that this does not fall into the traditional duties of the nurse⁵. This traditional concept should be discarded. A more practical and effective approach is shown in Figure 2.

Fig. 2



Definition of various grades

Because of the various training and teaching facilities available in different areas and situations and because of varying local needs it will be difficult to maintain the same standards on a broad basis. Basic definition of standards must be laid down by the South African Nursing Council including a more basic course, so that the confidence and respect of the medical profession as regards the clinical nurse are not put in jeopardy by having inadequately trained nurses functioning in this capacity.

Posts

If it is accepted that this category of nurse is here to stay and that her role could be a vital one then it must also be accepted that specific posts are going to have to be created for her to fill by the employing authority. At present posts intended for other categories of sisters are being utilised and blocked by the A.P.C.N. The ideal opportunity is provided for a career structure in nursing to occur where advancement in the clinical field can be achieved without the need to relinquish basic clinical attachment by entering purely administrative posts, as is so often the situation. While for many advancement into administrative work situations is ideal, there are a large number of experienced sisters who, to advance up the scale of promotion, have to relinquish the clinical aspect of their job, which may well be their first love. By having a career structure and advancement possibilities in the clinical field may well be an added drawback for people to enter nursing as a career.

Prejudice

- A. Medical — To a great extent when doctors have worked with this category of nurse and are exposed to her level of competence and diligent application to duties then prejudice tends to be overcome. In situations where medical officers feel themselves threatened by the presence of the clinical nurse prejudice remains. Once it is established that she is functioning 'in addition to' and not 'instead of' the medical officer, this prejudice tends to disappear.
- B. Nursing — On the nursing side some problems have been encountered. Initially, lack of understanding, insight or jealousy by other nursing

staff led to unwarranted remarks being passed about the A.P.C.N's. At some of the more peripheral hospitals senior sisters feeling threatened have been obstructive and made it difficult for the A.P.C.N. to apply herself fully in her new role. In our particular situation very few problems remain. Acceptance by other nursing staff has been the rule. We have found that problems are prevented by having it clearly established that a sister who is in charge of a ward remains in charge of that ward under her jurisdiction even though an A.P.C.N. may be functioning there in a different capacity.

Discussion

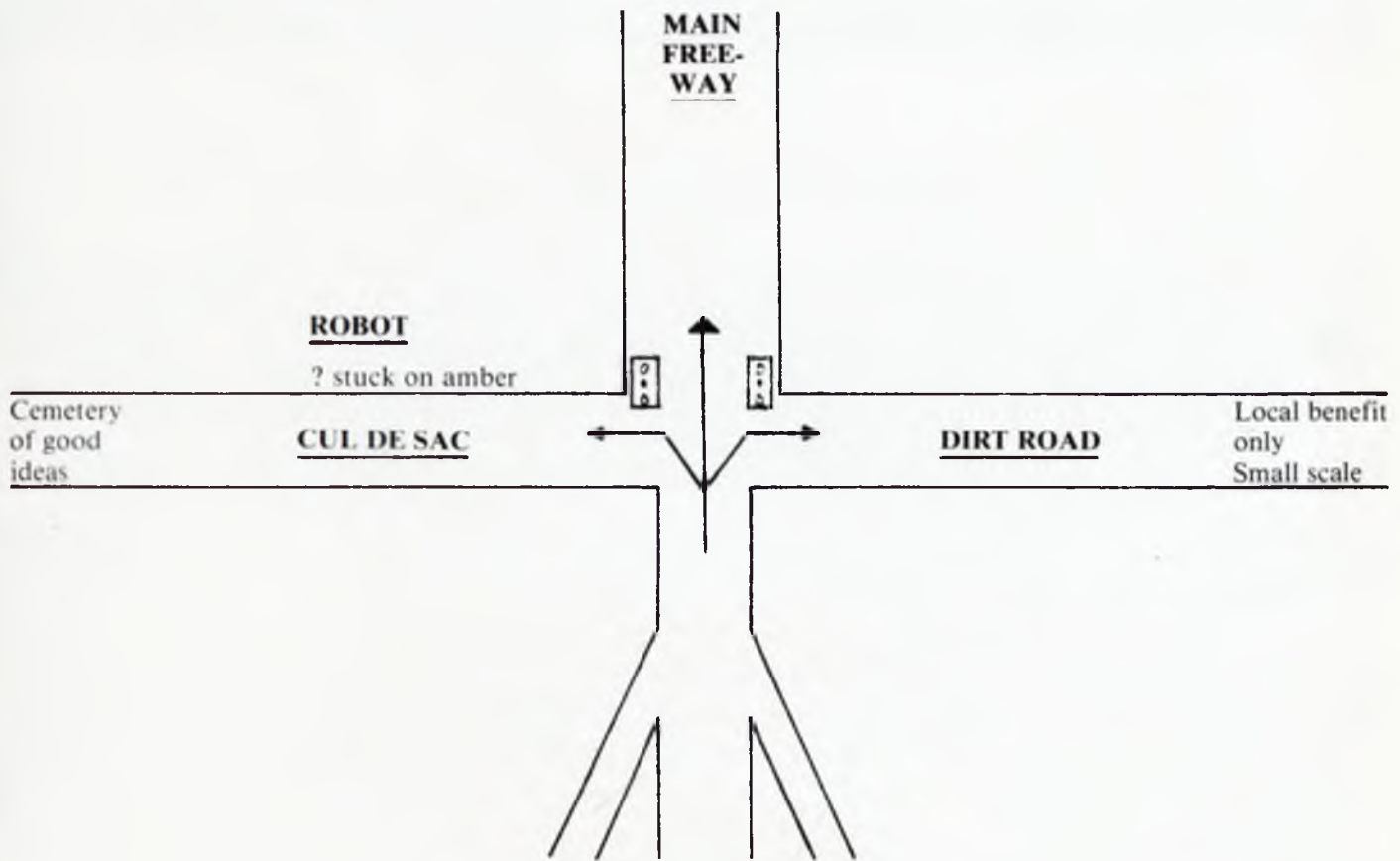
The world of health is a multidisciplinary one and there are many facets of health care delivery systems. The discussion is limited to the A.P.C.N. and the P.P.C.C.N. and their potential. We have specifically not entered into this discussion of the basic village health worker at grass roots level, nor into community health services which go towards making up a comprehensive health system. The scope of this article does not allow for such a widespread assessment.

Over 40% of the population of the Republic of South Africa is under the age of 14 years. It is estimated that at the present rate of growth 21.5 million children will need health care by the year 2000. These numbers alone justify the training of nurses in the specialized field of paediatrics rather than training generalists.

For most of our population a service which provides both preventive and curative aspects, available at the same time and place and within reach of the majority of the population being served is essential. To deliver such a service is beyond the manpower available especially in the form of doctors and must therefore by necessity involve other members of the health team. The clinical nurse can fill this role. After years of non-recognition by the appropriate powers the feeling amongst the A.P.C.N's has been that perhaps they had taken a shortcut to a dead-end. While sympathising with this attitude I disagree somewhat and feel that this concept has reached a crossroads situation as depicted in Figure 3.

CROSSROADS OF PROGRESS

- Official Recognition
- Definition of Role
- Definition Regarding Prescribing/Dispensing
- Large-Scale Application with many Centres training



Many different paths via various routes all aimed at the same ultimate destination ie. Improved medical care delivery system for children.

Fig. 3

In many different centres many individuals have undertaken to train nurses in various roles all basically aimed at the same ultimate destination, ie. an improved medical care delivery system for children. While these efforts are commendable, in this country the improvement in medical care has been a local one only. This road along which we are individually progressing is now at the crossroads where we seem to have a situation where forward progression on a large scale down the freeway is being blocked by a number of factors. If these obstacles are not removed, there are only two alternatives open to us. We can turn in the one direction into a cul de sac which leads to the cemetery of good ideas or we can turn in the other direction down a dusty and difficult road which takes us to improved local benefits only on a relatively small scale. We can travel along the main freeway once the legal problems discussed in preceding paragraphs have been solved.

It is said that necessity is the mother of invention. If this is true then this mother having undergone a long

gestational period of at least six years so far, is now in potentially obstructed labour. Rapid intervention is required if the baby is to be saved. Once born there will still be many teething problems ahead but if adequately nurtured and cared for the potential for good future growth and development is tremendous.

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