EXPANSIONS IN CLINICAL NURSING PRACTICE

Nelouise Geyer, M.Cur
Democratic Nursing Association of South Africa

ABSTRACT

In this article some expansions to which nurses are exposed in clinical nursing practice, are highlighted.

The emphasis of the Health Policy in South Africa is currently changing from a mainly curative to a mainly primary health care orientated service. Nurses are the largest group of health workers available in the country which makes this profession critical in delivering health service at grass roots level. To enable the nurse to deliver this service there are several aspects that have to be addressed: enabling legislation; additional training; improved patient:staff ratios; adequate facilities, supplies and remuneration; incentives to work in rural and isolated areas and accreditation of private providers. Abortion on demand is currently intensively being debated in this country. Besides the moral or ethical objections that nurses may have, abortion on demand will place an additional load on hospitals and nursing services.

In rural areas where the services of a radiographer are not available, the phenomena of nurses taking X-rays has appeared. This raised the question of: does this task fall within the scope of nursing practice?

Epidural pain control and anaesthesia have become increasingly common in practice. It is impossible for nurses to distance themselves from modern techniques of pain control. This also raises the question of: does mentioned activities, once again, fall within the scope of nursing practice.

OPSOMMING

Enkele uitbreidings in die kliniese verpleegpraktyk in Suid-Afrika waaraan verpleegkundiges blootgestel is in die kliniese praktyk, word in hierdie artikel uitgelig.

Die klem in die Gesondheidsbeleid van Suid-Afrika is tans besig om te verskuif van 'n hoofsaaklik kuratiefgeoriënteerde diens na 'n hoofsaaklik primêre gesondheidsorg-georiënteerde diens. Verpleegkundiges is die grootste groep gesondheidswerkers beskikbaar in die land en is dus die professie wat hierdie diens op voetsoolvlak sal moet lewer. Om die verpleegkundige in staat te stel om hierdie diens te lewer is daar enkele aspekte wat aangespreek moet word, naamlik instaatstellende wetgewing, addisionele opleiding, beter pasiënt:personeel ratios, voldoende fasiliteite, voorraad en besoldiging.

Aborsie op aanvraag word op die oomblik intensief in die land debatteer. Buiten morele of etiese besware wat verpleegkundiges mag hê, sal aborsie op aanvraag 'n addisionele las op hospitale en verpleegdienste plaas.

In plattelandse areas waar die dienste van 'n radiografis nie beskikbaar is nie, het die verskynsel na vore getree dat verpleegkundiges die neem van X-strale begin behartig het. Dit het die vraag laat ontstaan of die taak binne die verpleegkundige se bestek van praktyk val.

Epidurale pynbeheer en narkose kom toenemend meer algemeen in die praktyk voor. Dit is onmoontlik vir verpleegkundiges om hulle van die gebruik van moderne tegnieke van pynbeheer te distansieer. Dit het ook die vraag of dit binne die verpleegkundige se bestek van praktyk val, laat ontstaan.

INTRODUCTION

Over the years various expansions of the role of the nurse took place to fill gaps which developed in the health care needs of the country. The purpose of this article is to highlight the implications/effect of some recent developments in the nursing profession. These recent developments include primary health care; abortion on demand; taking X-rays and epidural pain control.

NURSE PRACTITIONERS AND PRIMARY HEALTH CARE

The focus of the Health Care Policy of South Africa is moving from a mainly curative orientated service to a mainly primary health care orientated service. Statistics of the health care professionals available in the country indicate that nurses are the largest group and would, therefore, be the profession of choice to provide a health care service at grass-

roots level (DOH, 1994: 19). A number of nurses have been performing these duties for a long time, but for many it will be a new and unfamiliar experience. To enable nurses to deliver an adequate and efficient primary health care service, the following aspects need to be addressed:

Enabling legislation

Restrictive legislation should be adjusted to enable the nurse to deliver a primary health care service in a more effective and efficient manner. Acquiring, possessing, using or supplying drugs currently does not fall within the registered nurse's scope of practice unless she:

- is herself in possession of an article 22A(12) permit (South Africa, 1965) issued by the Medicines Control Council of the Department of Health or runs an occupational health service which has a similar permit. Act 101 has recently been amended to include the nurse as a practitioner who may acquire and prescribe drugs, but within a framework of certain regulations that still have to be issued by the Department of Health (South Africa, 1991).

It is interesting to note that in the United Kingdom the role of the nurse practitioner (prescribing nurses) was developed to compensate for a primary health care physician shortage. Patient satisfaction with nurse practitioner care have been consistently high, and nurse practitioners have had positive effects on the long-term care of people with chronic disorders. Nurse practitioners have continued to provide access to services where physician shortages persisted, e.g. inner city areas and homeless people. The nurse practitioners not only practice in primary health care, but in many hospital settings too. In a country where health is expensive, nurse practitioners have been found to be cost-effective, which no doubt contribute to their popularity. In the US these positive outcomes for nurse practitioners have ensured not only their survival, but also their consistent growth in numbers (RCN, 1996: 6,7).

- is employed by a national/regional/provincial/local authority, and is authorised in terms of Section 38 A of the Nursing Act No 50, 1978, as amended (South Africa, 1981) to do a physical assessment; diagnose a condition; keep, prescribe, supply and administer drugs for the condition.

It would seem, however, if one reads the New Health Care Plan with the Government's latest document on its Drug Policy, that it is going to be more difficult rather than easier for the private sector and therefore private nurse practitioners to assist with primary health care (DOH, 1994: 51 - 52; DOH - NDP, 1996: 6). This is cause for great concern and this will be dealt with later in this article.

Additional training

Many nurses in the country at primary health care level now find themselves responsible for physical examination and diagnosing of patients visiting the clinic. Many nurses have been doing this for years, others feel that they do not have the necessary skills to perform these procedures confidently and competently (DOH, 1996: 25). If caring were enough, anyone could be a nurse. While the good intentions and kindness of supportive staff may be genuine and valuable, they count for little when the nurse is faced with subtle clinical cues and complex interventions. A major

educational drive will have to be instituted to prepare a sufficient and significant number of professional nurses to function competently at primary health care level as the nurse will be the first contact in the health care field (DOH, 1994: 37; DOH, 1996: 25). The additional training nurses require is:

- primary health care training, which consists of more than just diagnostic and physical assessment skills;
- updating of pharmacology knowledge;
- management skills.

Staff : patient ratios

The public service has a severe shortage of staff (DOH, 1996: 25). The staff establishment of public health care services is constantly eroded by an exodus of nurses to the private sector for higher salaries and better working conditions. The result is poor staff:patient ratios. This situation was considerably exacerbated by the announcement of the Minister of Health that all mothers and children younger than six will receive free health care from 1 April 1995.

Although an applaudable service, already overburdened facilities were flooded with patients - many of whom came from areas outside the borders of a particular province. This had serious implications for the already overstretched health budgets of the provinces. No additional staff to deliver the much needed service could be appointed due to budgetary constraints (Newswatch, 1996 : 5). In addition, both males and females can currently go to any state hospital to have a sterilisation done free of charge.

This leaves the nurses currently responsible for delivery of the service extremely stressed, tired and burnt out. Many nurses can empathise with the frustration of sending people away just because they could not be serviced on that day. Nurses could always take pride in the decency of their work and its social value. Today many nurses are robbed of that satisfaction as they are forced to do more with less. The choices are to lend their credibility to a bad situation or walk away. Ultimately it is the patient who suffers. The patient is surrendered to the care of the nurse and he may never be used as a bargaining tool.

The announcement by the Minister of Health that free primary health care services will be made available from 1 April 1996, further worsened the burden placed on the staff in the clinical situation (Newswatch, 1996: 5).

Adequate facilities and supplies

The facilities in the public service are currently not sufficient to provide an adequate primary health care service to the community (DOH, 1996: 34). The available facilities are overcrowded, as already mentioned, and medical, drug and other supplies are too inadequate to meet the demand resulting in referral hospitals being used inappropriately. The health budgets of the provinces cannot provide for the increased need for supplies. New clinics have been built in certain areas but there is no staff to deliver the service and no supplies to treat the patients.

The Health Systems Trust did an impact study on the free health services earlier this year and came up with the following findings which confirm many of these observations (Ensor & Strachan 1996: 1; Korrespondent 1996: 3):

- the rendering of free health care to pregnant women and children under 6 shows a promising trend of improving the poor health situation of state patients. Attendance at antenatal clinics increased and

unbooked deliveries decreased in Baragwanath from 14% to 4 %. The risk of baby deaths decreased. Attendance at family planning clinics has increased and no proof could be found that the birthrate increased.

- the rendering of free health services has, however, exacerbated problems in the system, namely that clinics and hospitals have to service many patients resulting in a decrease in the standard of health care delivery.
- other problems identified were:
 - problems with obtaining and distributing drugs;
 - shortage of trained staff and facilities;
 - overloaded services at bigger hospitals;
 - income from patient fees decreased by 30 % resulting in a loss of R41 million in only 4 provinces;
 - drug expenditure in the public sector increased from 12,5 % to 25 % of state health expenditure;
 - many private doctors have lost income because many of their cash paying patients now attend state clinics.

Adequate remuneration

Over the years various experienced nurse practitioners have left the public service for better remuneration and better working conditions in the private sector. It is hoped that the new salary grading structure which was implemented in July 1996, will improve the retention of staff in the public sector. The working conditions will, however, still require serious attention as better remuneration may not be enough to keep staff under the conditions already described (DOH, 1994: 18,22, 39, 75; DOH, 1996: 38; Newswatch, 1996: 4).

Incentives to work in rural and isolated areas

The need for staff is the greatest in rural and isolated areas. The Ministry of Health is currently looking into possibilities to provide adequate staffing in rural areas, e.g., incentives and contracts with trainees to render a service of 1 - 2 years after completion of their training (DOH, 1994: 39 - 44; DOH, 1996: 34).

Accreditation of private providers

To augment the primary health care services of the country, the private sector will be accredited to help with the delivery of the primary health care services. According to current government policy, such an accredited service will have to be able to provide the full range of services which the state wishes to provide (DOH 1996: 19-21). It would, however, appear that the state will not easily be accrediting individual private nurse practitioners. This view is strengthened by the fact that doctors are being imported from other countries to deliver services in rural areas. This, in the view of the author, is shortsighted in that the public sector does not have adequate staff and facilities to service certain areas, and that a number of private nurse practitioners are currently providing a very valuable service in those areas. The South African Nursing Association (SANA) made in-

put on 24 November 1995 at a forum of the Department of Health where consultation on accredited private providers took place, to motivate for accreditation of private nurse practitioners.

Accreditation of private providers who can provide a full range of services, strengthen the belief that group practice in its various forms will probably be the way in which health care delivery in the private sector will have to take place in future (DOH, 1996: 19). Limiting legislation should be repealed to enable such group practices. The Medical, Dental and Supplementary Health Service Professions Act (South Africa, 1974) has an ethical rule 9(ii) which prohibits collaboration between medical practitioners and health professionals not registered in terms of that Act, e.g. nurses and pharmacists. This makes the possibility of a partnership between a medical practitioner and a nurse impossible and therefore limit the possibilities of a group of private practitioners in the health field to provide a comprehensive range of services. SANA is involved in a Therapeutic Alliance group where issues to enable group practice are being discussed.

It is, therefore, clear that there are many facets surrounding the delivery of primary health care which must still be addressed to ensure the delivery of an adequate, efficient and accessible service for the South African community.

ABORTION ON DEMAND

Those regularly reading the daily press will have noted the debates around changes in the Abortion and Sterilisation Act to enable abortion on demand. Currently very specific legal guidelines exist according to which a legal abortion can be done. There are seven legal indications (South Africa, 1975: section 3):

- Where the continued pregnancy endangers the life of a woman.
- Where the continued pregnancy constitutes a serious threat to the woman's physical health.
- Where the continued pregnancy constitutes a serious threat to the woman's mental health, and is of such a nature as to create the danger of permanent damage to her health and the abortion is necessary to ensure her mental health.
- Where there exists a serious risk that the child to be born will suffer from a physical or mental defect of such a nature that he will be irreparably seriously handicapped.
- Where the foetus was conceived as a consequence of rape.
- Where the foetus was conceived as a consequence of incest.
- Where the foetus has been conceived as the result of illegitimate intercourse with a mentally incompetent woman who is unable to comprehend the consequential implications of, or bear the parental responsibility for, the fruit of coitus (s 3).

The Current Situation

Legal abortions are done in a state hospital or an agent appointed by the State, e.g., a private hospital (South Africa, 1975: section 5). Some nurses don't wish to nurse these patients on moral and ethical grounds. Although the

current legislation does make provision for a so-called "conscience clause" (South Africa, 1975: section 9), in the practical situation nurses are finding themselves in conflict: they wish to refuse to participate in an abortion, but there is nobody else to look after the patient who is already admitted.

What usually happens is that the patient is referred by the doctor to an institution for the procedure and generally the patient's doctor sees the patient in hospital only after the products of conception have been passed when she goes to theatre for a Dilatation and Curettage. One of the methods used for termination of pregnancy involves epidural analgesia and so either intensive care nurses or midwives are expected to look after the patient. The anaesthetist commences the epidural and the patient is then left to the nursing personnel, including delivering the products of conception. The nurses constantly end up participating in abortions against their wishes. Such a situation increases the nurse's moral and/or ethical conflict.

Patients going for abortion require specialised counselling. Nurses do not always feel adequately skilled to be responsible for such counselling and no indication is given whether the patient did in fact receive any counselling from her doctor or other health professional before (or after) these procedures.

Urgent issues

Now that the Abortion Bill is being discussed and it is clear that abortion on demand may become legalised, these procedures are bound to increase and simultaneously also the problems nursing staff are experiencing. Judged by the influx of patients after free primary health care was announced, it can be expected that the patient load of the relevant wards will increase with a resultant negative effect on staff:patient ratios, possibly compromising quality care.

It therefore seems that there are two issues here which need urgent attention:

- (i) a study should be done to determine whether there are sufficient resources to accommodate an increase in procedures for termination of pregnancy;
- (ii) ethical and legal guidelines need to be set to accommodate all parties involved in case abortion-on-demand becomes a reality. The nursing profession should debate this issue in-depth and be full participants in drawing up these guidelines.

Abortion on demand is an emotive issue - it must however be debated by the nursing profession in order to determine some standards/procedures to ensure the moral and ethical comfort of all concerned.

NURSES TAKING X-RAYS

The Hazardous Substances Act (South Africa, 1973) require that any person responsible for executing X-ray investigations, should have adequate training and experience. In rural areas with smaller hospitals, the services of a radiographer are often not available or, alternatively, there is no suitable person to fill a post which may be available. True to the nature of nursing, nurses stepped in to fill this need. These nurses often receive only the very basic in-service training to enable them to take X-rays (NHDP, 6/1994: 1).

The problem

This dilemma was brought to the attention of SANA and the question arose as to whether these nurses were acting within their scope of practice, had had sufficient training and were in fact safe radiation workers. The nurses involved in taking the X-rays experienced many problems such as being called out at all hours, lack of overtime pay, safe practice, and feelings of being exploited. A survey done to determine the extent of the problem indicated that the majority of nurses involved in taking X-rays are in the Northern Cape (NHPD, 1/1994: 6).

Some solutions

After many discussions and meetings between the various roleplayers, the following principles were agreed upon (NHPD, 6/1994: 2,3; Geyer, 1993: 41):

- taking of X-rays does not fall within the scope of practice of a nurse
- no indemnity cover will be provided for incidents arising when X-rays are taken
- in instances where the nurse is the only one available to take the X-rays, the following principles should be adhered to (NHPD, 6/1996: 3):
 - . the nurse must be registered by the employer with the Department of Health as a radiation worker in terms of the Hazardous Substances Act 15 of 1973;
 - . the nurse must receive protection against radiation which would apply to a practitioner normally performing the procedure;
 - . the nurse must be properly trained to perform such a procedure. Where this is not possible the medical practitioner will be responsible for taking the X-rays;
 - . the nurses should receive payment for services rendered outside their normal duty hours.

The Professional Council for Radiographers is currently developing a training programme for supplementary diagnostic radiographers. A once only opportunity was made available to registered nurses to apply at the South African Medical and Dental Council (SAMDC) during 1994 to undergo such a course in order to ensure adequate training (NHPD, 6/1994: 2; Registrar, 1994: 2). Each applicant will be evaluated to determine what is needed to make the nurse a safe practitioner in this field. Only registered nurses will be allowed to do this course as they already have some background as a result of their comprehensive training. Each applicant will then only have to complete the theoretical and practical components that they lack.

EPIDURAL PAIN CONTROL

The use of epidural pain control and anaesthesia has become increasingly popular for various procedures. It is impossible for nurses to dissociate themselves from the utilisation of modern methods of pain control but the question arises whether this technique falls within the nurse's scope of practice.

SASA Guidelines

The anaesthetist is quite happy to insert the epidural catheter and to establish an effective epidural block. The anaesthetist is NOT prepared to stay with the patient to supervise the pain control until it is no longer required. The SA Society of Anaesthetists (SASA) Guidelines for Practice IV are quite clear in this regard as quoted in the following (SANA, 1995: 88):

"Monitoring and clinical observations"

A qualified nursing sister or trained observer must be in constant attendance in order to perform regular and appropriate monitoring of both the patient's physiological status and the effects of the block.

Such an observer shall i) have been trained in the proper use and understanding of monitoring equipment, and ii) have the necessary clinical skills to perform, interpret and react appropriately to basic clinical observations made on the neurological, respiratory and cardiovascular systems.

Such an observer shall be trained in measures related to basic life support.

All orders and routines to be followed by the observer should be personally conveyed (preferably in writing) by the responsible anaesthetist.

The responsible anaesthetist must at all times be available to the observer for consultation and recall.

Availability of the responsible anaesthetist where no surgery is in progress

In addition to abovementioned, the responsible anaesthetist must at all times be available for the timeous and effective management of any deleterious sequelae related to the procedure.

This availability should be interpreted according to the stage of involvement of blockade and the likelihood of complications pertinent to that stage, the concomitant use of other drugs including those for sedation, and the presence of underlying patient disease and physical status.

It is thus incumbent on the physician to be physically present at the bedside until complete regression of blockade provided the other conditions of this memorandum are fulfilled.

The responsible anaesthetist is free to embark on other procedures provided this does not conflict with the other conditions of this memorandum.

Topping-up and management of continuous infusions

There is no objection to a qualified nursing sister or junior doctor undertaking topping-up or adjustment of continuous infusion rates. The responsible anaesthetist must however be satisfied as to the experience and capabilities of such a person and each top-up or change in dosage should be at least verbally confirmed.

The ultimate responsibility for the effects of these manoeuvres still remains that of the anaesthetist responsible for the procedure".

Scope of Practice

The SA Nursing Council views epidural analgesia as part of the scope of practice of the registered nurse and the registered midwife. The standpoint of the SA Nursing Council regarding epidural pain control is as follows (SANC, 1994: Annexure A: iii; SANA, 1995: 93,94):

The Council does not approve of a registered nurse or registered midwife topping-up or maintaining an epidural block for the purpose of **anaesthesia**. This does not mean that she is not responsible for the specific nursing care of the patient which she must continue to provide.

In view of the following provisions of the scope of practice of registered nurses or registered midwives, the maintenance of epidural analgesia by means of topping-up or continuous administration is understood to be part of her practice (SANC, 1984). In particular Regulations 2(b), 2(q) and 3(a) and 3(b) refer:

- 2(b) the execution of a programme of treatment or medication prescribed by a registered person for a patient;
- (q) preparation for and assistance with operative, diagnostic and therapeutic acts for the patient;
- 3(a) the diagnosing of a health need and the facilitation of the attainment of optimum physical and mental health for the mother and child by the prescription, provision and execution of a midwifery regimen or, where necessary, referral to a registered person or by obtaining the assistance of a registered person, as the case may be;
- (b) the execution of a programme of treatment or medication prescribed by a registered person.

The rules setting out the acts or omissions in respect of which the Council may take disciplinary steps substantiate this view (SANC, 1985: 4(f), (g) and (h)):

- (f) the checking of all forms of diagnostic and therapeutic interventions for the individual;
- (g) specific care and treatment of... the vulnerable and highrisk patient; and
- (h) the monitoring of all the vital signs of the patient concerned.

Specific preparation as suggested by SANA

Nurses should be involved in the provision of epidural analgesia for pain control. No nurse or midwife should endeavour to become competent in the above unless she has at least one year of continuous midwifery or intensive care or 2 years of general nursing experience and is assessed as competent by her peers in clinical practice. (This assessment should preferably be by a midwife who has an advanced midwifery diploma and a nurse with an intensive care diploma). A learning programme should be completed successfully prior to participation in epidural procedures (SANA, 1994: 1).

Participation of anaesthetists in the above learning programme should be encouraged. Re-assessment of competence should be done annually.

All the criteria in the SASA document: Guidelines for Practice IV must be strictly adhered to by the anaesthetist. It is up to the nurse to check for these criteria and she has a right to refuse participation in the prescriptions of the anaesthetist if she is not satisfied (R387 applies).

The nurse also has the right to refuse to carry out a task reasonably regarded as outside her scope of practice and for which she has insufficient training or for which she has insufficient knowledge and/or skill. If, however, it becomes company policy to make use of epidural pain control, the nurse and the company have an obligation to seek continuing professional education in order to prepare her for such a responsibility (SANA, 1994: 91).

Prescription

A registered nurse or registered midwife should accept a prescription only after ethical consideration thereof (SANC, 1994: Policy on Ethical Considerations No 7: 15). To enable the nurse to provide safe adequate nursing, she has the right to insist on refusing to implement a prescription or to participate in activities which, according to her professional knowledge and judgement, are not in the interest of the patient.

The following are essential for an acceptable prescription from the anaesthetist:

- * Maintenance
 - Intermittent topping up.... ml.... dose.... strength....(drug) via epidural catheter
 - Epidural infusion.... ml....(drug).... dose in ml infusion at(rate) per hour.
- * Monitoring, ie:
 - Blood pressure
 - Pulse and foetal heart rate
 - Respiration
 - Level of analgesia
 - Ability to move lower limbs, ie. intensity of block
- * Action in the event of Hypotension
 - e.g. "if the systolic drops below... mmHg give and ...
- * Action in the event of any other side-effects, e.g.:
 - if there is sensory impairment above rib margin/signs of Horner's syndrome, switch off infusion pump and inform anaesthetist.
 - if respiration drops below..../minute, give..... or stop infusion.

If a written protocol for emergency does not exist, the anaesthetist must also include in his prescription actions to be taken in an emergency. *If the prescription for treatment and intervention is not complete, the nurse can refuse to accept a patient in her unit* (SANC, 1994: Policy on Ethical Considerations No 7: 15).

The above information must be in writing and in the form of a legal prescription. **NOTE:** verbal prescriptions should not be accepted by the nurse. So-called "standing orders" are **NOT ACCEPTABLE** (SANA, 1994: 91). The policy of the Nursing Council regarding standing orders are as follows (SANC, 1994: Annexure A: v):

"Standing prescriptions are medical prescriptions issued and signed by a medical practitioner, where routine administration of certain medications is required in specific non-emergency patient care situations. Standing prescriptions do not comply with the requirements of a legally valid prescription. However Council recognises that due to the pressures in the health care situation use is being made of standing prescriptions. To eliminate risks and ensure that each standing prescription becomes an individualised, legally valid prescription, nurses and midwives may make use of multi-copies of standing prescriptions in the following way:

The patient's name and admission/hospital number shall be specified on a copy of the standing prescription;

- The copy shall be attached securely to the patient's treatment record/prescription chart; and*
- The prescribing doctor shall sign and date the standing prescription at the earliest opportunity."*

The role of the registered nurse/midwife

The close monitoring and observation of the patient's reaction to the introduction of the analgesic or anaesthetic agents and the necessary interventions required to ensure the safety of the patient (and the foetus where applicable) are the nurse's most important role. Meticulous record-keeping is of the utmost importance.

A registered nurse or registered midwife must be present during the insertion of the catheter if at all possible and must record on the patient's chart her observations in this regard as well as the depth of catheter insertion. The position of the catheter must be checked regularly as part of observation and before topping-up, the correct position must be verified (SANA, 1994: 94).

A registered nurse or registered midwife may mix medication on prescription of a medical practitioner provided that the procedure is checked by a second registered person. The SA Nursing Council and SA Society of Anaesthetists are of the opinion that a registered nurse and registered midwife must not administer the first dose or any bolus containing anaesthetic and also not mix such medication (SANA, 1994: 92). (It is felt that the bolus of a local anaesthetic should be added as at any stage of the epidural the administration of such, carries significant risks). Furthermore, epidural opiates are being used increasingly for epidural analgesia and the bolus injection of these do not carry the same risk as that of a local anaesthetic agent.

The registered nurse and midwife has an obligation to keep abreast of the advances in epidural anaesthetic techniques and to update her knowledge at all times.

Dangers

The methods of topping-up versus continuous infusion are both acceptable although many nurses prefer topping-up as they maintain there is greater control and that it is safer than the continuous infusion. The administration of Oxytocin into the epidural continuous infusion line instead of the intravenous line has occurred in the UK. A major hazard is the possible insertion of the epidural infusion line intravenously during the use of other infusion pumps during labour. Extreme care should be exercised in this regard and the purpose of every line should be identified clearly with labels on the tubing (SANA, 1994: 89).

In conclusion it must be noted that the nurse is always accountable for her acts and omissions when she accepts the anaesthetist's prescription and she has an obligation to ex-