Critical reflective inquiry for knowledge development in nursing practice

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This paper presents a method of inquiry which uses nurses' situated, individual instances of nursing practice as the basis for developing knowledge for nursing and improving practice. This method of inquiry is founded upon the ideas in action science and reflective practice, and critical philosophy. Nursing practice is viewed as a rich source of new knowledge as practitioners are engaged in creating as well as modifying knowledge to respond to specific clinical situations. At the same time, practitioners may be in practice without recognizing deficiencies or ineffectiveness. As a method to tap these two aspects of practice, the inquiry is designed to encompass three phases, i.e. descriptive, reflective and critical/emancipatory, and is oriented to provide understanding to practitioners of the nature and meaning of their own practice, to correct and improve practice through self-reflection and critique, and to generate models of 'good' practice and theories of application as well as to discover processes of practice as played out in clinical situations. This method of inquiry can be used by nurses and nursing students in collaboration with researches or mentors to develop nursing knowledge about practice, improve individual practice, and engage in shared learning.

Keywords: action science, critical philosophy, emancipation, nursing practice, reflective practice

INTRODUCTION

During the last three decades, nursing knowledge has been developed mostly applying the accepted empirical methods of inquiry with the primary aim of establishing a systematic, generalized knowledge-base for practice. In the recent years, however, this orientation has been modified by an increased interest in and acceptance of various interpretive methods such as phenomenological, hermeneutic and critical approaches to advance nursing knowledge. The discipline of nursing certainly needs to apply both of these methods (i.e. the empirical and interpretive) in order to address the complex nature of its subject matter and for the development of its science. Additionally, nursing needs to develop and apply methods that draw from the situated, individual instances of nursing practice in order to develop and augment the knowledge necessary to improve its practice. This is based on the recognition that nursing knowledge production must also be viewed in conjunction with practice itself as practice involves not only the use of knowledge but gaining of new knowledge as well. Furthermore, nursing faces a new era of fusioning and synthesizing knowledge for its application to practice (Kim 1993a).

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The complexity of practice in terms of knowledge use and knowledge production suggests the need for nursing as a human science and a practice discipline to develop a method of inquiry that involves practitioners in the inquiry. This proposed method of inquiry therefore involves critical examination of what is actually going on in situations of practice through a systematic self-reflection, reflective discourse, and critically oriented change. While critical reflective inquiry as a method is not oriented to verification or refutation of theories and hypotheses, its goals are to: (a) understand the nature and meaning of practice to practitioners; (b) correct and improve the practice through self-reflection and criticism; and (c) generate models of 'good' practice and theories of application through reflection and critique of actual occurrences.

The premises

Each practice event or situation evolves from the practitioner's knowledge and experiences at a given time and the use of knowledge available to the practitioner, and in turn the practitioner's knowledge and experiences are informed and formed by that practice. Hence, we can say that some form of nursing knowledge is produced in everyday settings of practice and that there are theories of application being used to co-ordinate and package new and old knowledge and experiences in practice. However, the knowledge produced in situations of practice differs from that produced in the scientific arena in three senses: (a) knowledge produced in practice is the knowledge of application that is tailored to specific situations, so the question of generalizability does not enter into its production; (b) it is the practitioners who are intimately and directly involved in production as well as in judging the validity claims about that knowledge insofar as such knowledge is not exposed to specific processes of validation beyond the practice itself; and (c) knowledge produced in practice is likely to remain as personal knowledge. This means that knowledge production through nursing practice may be done poorly or expertly and result in knowledge that is good or bad, or that is innovative or redundant. Hence, an inquiry into the nature of knowledge production and processes of application needs to involve practitioners in a reflective and critical mode.

Furthermore, as Argyris and Schön (1974), and Argyris, *et al.* (1985) have indicated in their discussion of action science, professional practitioners often engage in practice with theories-in-use which tend to be oriented to routinization and self-interest and are often quite different from their espoused theories. This suggests that what nurses do in practice may not be as good as what the nurses believe they are doing. Hence, it is necessary to assume actual practice as being 'good' or 'effective' as well as being 'inadequate' or 'poor' (Kim 1994a). What is necessary, then, is to develop a method that can discover why such diverse patterns may exist in practice, that is, both synthesizing and 'closed' forms of practice.

Schön (1991) advanced the notion of reflective practice which has been widely adopted in nursing practice and nursing education in recent years (for discussions on nursing application, see Clarke 1986, Powell 1989, Jarvis 1992, Atkins & Murphy 1993, Davies 1995, Clarke *et al.* 1996, Carr 1996, and Rolfe 1997). It extends the ideas embedded in action science and incorporates the understanding that professional practice involves not a simple linear application of theory to practice but a much more complex process involving professionals' juggling of situational demands, intuition, experiences and knowledge (Schön 1991). Reflective practice encompasses both reflection-in-action focusing on the process of knowledge-use in action and reflection-on-action focusing on the mode with which professionals can gain additional knowledge from their experiences (Schön 1991). The method of inquiry proposed in this paper begins with Schön's notion of reflection-on-action but extends it further to be used not only as a way to add to professional's personal knowledge but also as a method to be used to develop knowledge in the public domain, that is, 'shared knowledge'.

In addition, in nursing as in clinical psychology as suggested by Shapiro and Reiff (1993), there is a paucity of knowledge regarding how practitioners produce positive outcomes in clients. Nurses are confronted with multiple sets of theories regarding human conditions and nursing therapeutics which sometimes provide competing, conflicting or mutually supportive knowledge as well as a deficiency in providing comprehensive explanations and/or definitive approaches to solving nursing problems. Still, nurses are able to provide good care and often have effective outcomes most of the time. Benner (1984) suggested this as the evidence of experts' 'intuitive grasp' with which experienced, expert nurses are able to respond to situations of practice. In a similar vein, Freidson (1970) characterized physicians' mode of work as clinical mentality which upholds the personal knowledge and clinical experience of the physician as playing the essential authority for his/her practice. On the other hand, Atkinson (1995) elaborated on a notion that medical practice results from a complex interplay among the 'voices of experience, of science, and of advice and maxims'. Thus, the role in actual practice of the established knowledge in the public domain or the shared knowledge among the professionals remains controversial. This also suggests that there is a lack of knowledge regarding theories of 'application' or theories of 'practice'.

THE METHOD: CRITICAL REFLECTIVE INQUIRY

Based on the premises specified in the preceding section, this proposed method begins with the notion of action

science and reflective practice, and incorporates Habermas's critical philosophy (Habermas 1984) and Bourdieu's theory of practice (Bourdieu 1990). From the critical philosophy perspective, nursing practice is viewed as a form of social life in which different forms of domination, distortions and misunderstandings are possible. Hence, any study of practice needs to incorporate an emancipatory project through which social life can be freed from domination and distortions (Habermas 1984). In addition, practice as a form of human action is viewed to be the product of both the *habitus* and the accommodations that are made on the spot of actions (Bourdieu 1990). According to Bourdieu (1990), the study of practice therefore must also involve the understanding of not only the *habitus* but also the forms of accommodations and adaptations that are only discoverable in actual instances of practice.

In this method, nurses' practices are analysed through the reflective analysis of narratives of practice instances, critical structural analysis of intentions and actions, and formulation of emancipatory projects. This is a method of research that is oriented to discovering various forms of coherence or incoherence and consistency or inconsistency between practitioners' beliefs and actions, exploring different models of knowledge-use in clinical situations, and identifying various sources of influence on specific practice. This is also a method of inquiry that should be used by practitioners to improve their practice and stay in a learning mode with their practice. As suggested by Shapiro and Reiff (1993), through such an inquiry it is possible not only to increase the level of awareness regarding various features of one's practice but also to discover hidden theories of application and various forms of uses of personal resources in practice.

On one hand, critical reflective inquiry is necessary in routine and usual clinical situations because it is possible to discover and compare usual modes of practice through the inquiry. However, on the other hand, this inquiry will be most appropriate in problematic clinical situations such as: (a) those in which not much knowledge exist for practitioners to apply; (b) those where divergent approaches by different practitioners are adopted and used; or (c) those in which a great deal of controversy, misunderstanding and/or disharmony exists among practitioners or between practitioners and clients. By investigating practice in such situations it is possible not only to identify aspects or forms of practice to be improved but also to discover and generate new knowledge drawing from practitioners' personal knowledge.

The process of inquiry

In this inquiry, the term 'reflection' is defined as a process of consciously examining what has occurred in terms of thoughts, feelings and actions against underlying beliefs, assumptions and knowledge as well as against the backdrop (i.e. the context or the stage) in which specific practice has occurred. Reflection involves an intentional looking-back by suspending oneself from the situation and what has occurred. Some authors (for example, Boyd & Fales 1983, Schön 1991, Atkins & Murphy 1993) consider this process to begin with an awareness of inner discomfort. However, in this inquiry this concept is not limited only to situations of inner turbulence but should be applied to any situation of self-examination.

The term 'critique' developed in the context of Habermas's critical philosophy (1984) and Freire's (1972) critical reflection refers to the process of identifying the nature of distortions, inconsistencies and disharmony emerging from reflection, and working towards correcting such disparities through various emancipatory processes. It involves both emancipation of oneself from self-deception (i.e. to free from the false-consciousness and make oneself open from being locked-up in false beliefs of being 'good' or 'correct'), and emancipation of participants (in our case, mostly nurses and clients) from misunderstanding and moving towards mutual understanding about goals and intentions.

Formulated with the above definitions, the critical reflective inquiry consists of three phases: descriptive, reflective and critical/emancipatory (Figure 1).

Descriptive phase

This phase involves a description by practitioners of specific instances of practice. Descriptive narratives of actual practice in specific clinical situations are written or constructed by nurses, including the descriptions of nurses' actions, thoughts and feelings, as well as the circumstances and features of the situations. This descriptive phase, through narratives, invites practitioners to open a door that has been closed behind, and to look back into the past. Narratives are being used in nursing research in various forms of narrative analysis, and are examined for their linguistic structure, story construction and meaning. However, in this inquiry narratives are used as a descriptive tool that specifies recollective genuineness, comprehensiveness and completeness with regard to practitioners' actual experiences in terms of actions, thoughts and feelings.

The researcher engages practitioners in analysing narratives to identify what is missing in the descriptions to make them comprehensive and complete. The researcher also can help practitioners to understand that narratives need to remain descriptive of what has happened and to recognize that after-the-fact interpretations are premature at this phase. The researcher's role in this phase is to clarify and bring forth a greater detail and truth to the descriptions. Writing of narratives in itself is analytical in the sense that practitioners become engaged in conscious

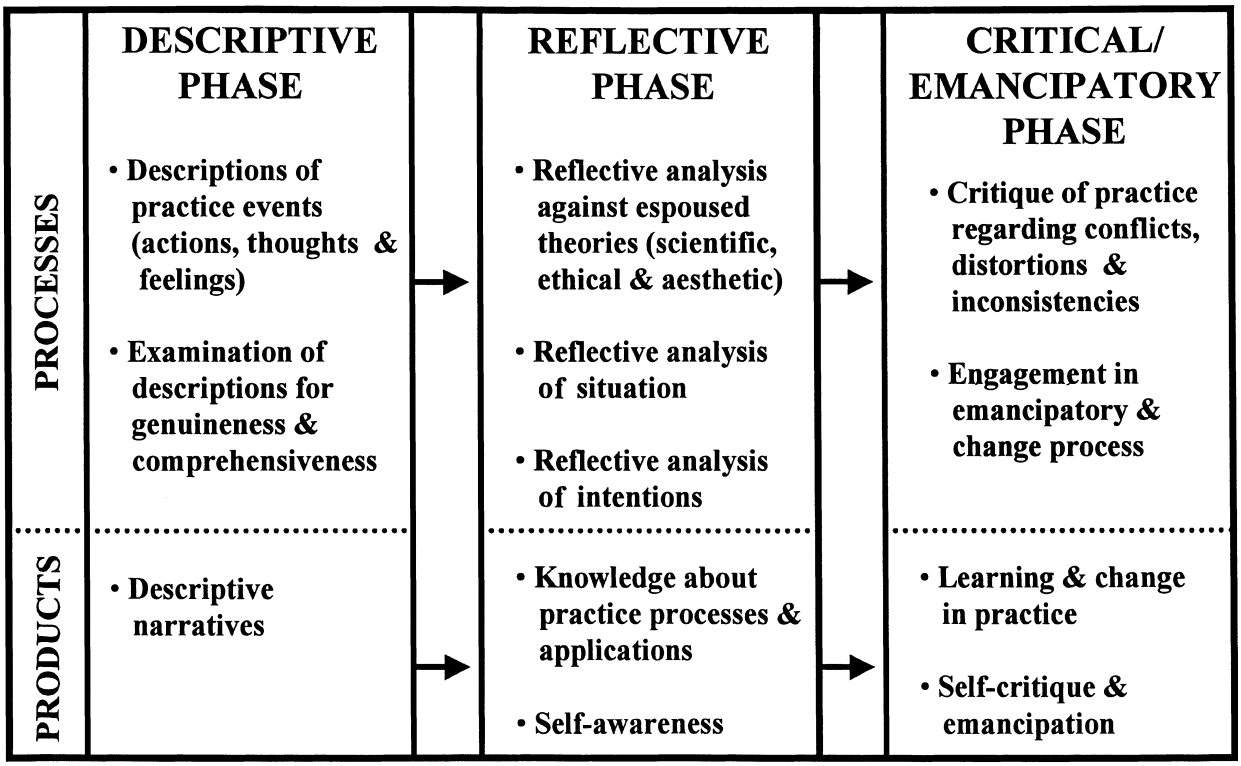

Figure 1 Phases in the critical reflective inquiry.

efforts to view themselves and their actions with a certain degree of detachment and suspension.

Reflective phase

In this phase, narratives that contain descriptions of what has occurred in practice are examined in a reflective mode against practitioners' personal beliefs, assumptions and knowledge. The reflective process involves three different foci: reflecting against standards or the 'espoused theories' in the 'action science' perspective, reflecting on situation, and reflecting on intentions.

As its first focus, the reflective process involves pitting narratives against (a) the scientific knowledge and claims, (b) ethical and value standards, and (c) aesthetic genuineness and creativity from both general and personal perspectives. This focus is based on the basic premise of the 'action science' and the assumption that nursing practice involves three aspects: scientific, ethical and aesthetic (Kim 1993b). The scientific aspect of practice refers to the use and application of empirical knowledge that is drawn either from a general scientific knowledge-base or from personal knowledge. On the other hand, the ethical aspect of practice refers to meanings and attitudes underpinning specific actions in practice, while the aesthetic aspect of practice refers to forms of self-presentation and creativity adopted by nurses in practice. Because knowledge generation regarding all three aspects of practice is essential for nursing, the practice needs to be examined in terms of the extent to which actual practice is aligned with the espoused theories regarding these three aspects of practice.

In order to carry out this step of the reflective process, the practitioner with the aid of a researcher needs to identify her/his own espoused theories in terms of beliefs, assumptions and knowledge applicable to the specific situation in a narrative as the first step. Secondly, the researcher and practitioner need to be involved in identifying specific shared (i.e. profession-based) espoused theories regarding scientific, ethical and aesthetic aspects of practice applicable to the specific situation. The descriptive narrative is then analysed to identify specific theories-in use. A critical, comparative analysis of theories-in-use and espoused theories leads to a discovery of the level of coherence and consistency between the theories that are actually used in practice and the espousals. This step in the reflective process brings to practitioners insights and self-understanding about their modes of practice. Practitioners can discover not only how they are able to handle complex clinical situations but also in what ways they become entrenched in routinized practice.

The second focus of reflective analysis involves reflecting on a situation in order to identify how specific aspects of each clinical situation affect actual practice. An analysis of the historicity and specific configurations of a situation provides an understanding of the situation's uniqueness as well as the situation's commonality and

shared features with other clinical situations. The analysis also includes the impact of such characteristics on the practice as it evolved in the situation. This analysis can lead to knowledge of application as to how practice eventuates in contexts and what the processes are in dealing with the complexities of clinical situations. This analysis can lead to a discovery of 'good' practice models of nursing care that result from an effective consolidation of personal and public knowledge to meet complex demands of clinical situations.

The third focus is the reflective analysis of nurses' intentions against actual practice. It involves reflecting on practitioners' intentions for actions that have resulted from their deliberations about what were to be done. Although nurses' deliberations may not necessarily be systematic or rational, deliberations produce intentions, either obvious or latent, for actions in practice (Kim 1994b). A reflective analysis of intentions against actions can give us insights into the role of intentions on actual practice and the process of practice. From this analysis knowledge can be gained regarding the process of practice in terms of the relationships between deliberation and action, the nature of decision-making, and the relationship between what Bourdieu calls the *habitus* and instantial accommodations. This is a very difficult aspect of the reflective process, as it is not easy for people to free themselves form 'rationalizations' they make of their actions and partition out which actions were intended from which actions were not intended. The researcher's role is essential in that the researcher needs to help practitioners not only in the reflecting act but also in constructing the frames with which the reflection must be carried out.

From this phase, models of 'good' practice, theories of application and knowledge regarding the process of practice can be identified and formulated. On the other hand, it is also possible to discover systematic inconsistencies and disparities between nurses' beliefs/intentions and actual practice, pointing to a need for re-learning or programmes of change.

Critical/emancipatory phase

This phase, moving from the reflective phase, is oriented to correcting and changing less-than-good or ineffective practice, or moving forward to future assimilation of new innovations emerging from practice. It involves discourses about the nature and sources of distortions, inconsistencies and incongruence between (a) values/beliefs and practice, (b) intentions and actions, and (c) clients' needs and nurses' actions, which have been identified in the reflective phase.

The researcher and practitioner engage in the process of critique in order to point out problems that require change in practice. The areas needing both self-emancipation and communal emancipatory process are identified and addressed in terms of how changes through 'genuine' understanding of oneself and others can be brought about in practice. Habermas's (1984) theory of argumentation may be expanded and applied during this phase to examine not only nurses' communications but also their actions for their validity claims. Through the researcher's questioning and probing, practitioners can engage in self-dialogue and argumentation with themselves in order to clarify validity claims embedded in their actions, bringing forth the hidden meanings and disguises that systematically result in self-oriented and unilateral actions or ineffective habitual forms of practice. Self-emancipation is the key desired outcome of this examination as through this process nurses may become open to new models of practice. Practitioners and the researcher can develop a process of practice that incorporates self-emancipation from routinized practice. In addition to self-emancipation, this phase can also be used to bring about an emancipatory culture in clinical settings, through some form of change process involving staff of a unit (or a hospital) as a group.

AN ILLUSTRATION

The project for the application of this method of inquiry was carried out in 1996 in Seoul, Korea, at one of the major teaching hospitals, where the mode of nursing practice is very similar to that in the United States of America (USA) and nearly all nurses at the hospital are prepared at the baccalaureate level. Because the major goal was to introduce the critical reflective model of practice to nursing at the hospital, the researcher and the nurse administrative leaders decided on a project that would first introduce and prepare nurse leaders to become familiar with this method of inquiry and also to internalize the philosophy of critical reflective culture of nursing practice. A 2-day retreat was instituted in which 75 nurse leaders of the hospital, composed of nurse managers, supervisors and head nurses, participated. The project was organized into three parts: the first part consisted of an orientation of the participants to the method and its philosophical and theoretical foundations; the second part engaged the participants through the three phases of the inquiry; and the third part was oriented to examining various ways in which the critical reflective culture can be incorporated into nursing at the hospital. The participants' engagement in the three phases of the inquiry proceeded as follows: (a) each participant was asked to write a narrative that was to be based on a recent clinical experience; (b) the entire group of participants was divided into small groups of 7–8 persons; and (c) each small group with the researcher's participation carried out the three phases of analysis of the narratives written by the members of the group. The details of this project including the analyses of the narratives and discussions of knowledge development issues will not be addressed in this

paper. An illustration using one narrative among the 75 written during the project is made here to describe how the three phases of the inquiry proceeded. The selected narrative is provided below with some of the identifiable aspect of the story disguised or altered.

The narrative

After lunch, I [the nurse] entered Room 4A where Mr K, a foreign patient has been in for the last 3 weeks. Mr K is 35 years old and has been referred to this hospital from his home country with a diagnosis of chronic prostatitis. He has had chronic lower abdominal and left flank pain for the past 5 years, and had gone through nearly 10 operations in his home country during the past three years for this. He has developed obstruction from massive scar tissue resulting from the surgeries, which has been causing a great deal of pain. He is quite depressed with the state of affairs, and has a great expectation at this hospital for some form of remedy. However, the repeated transrectal, prostate ultrasound examinations revealed non-remarkable findings except some tissue damage due to the surgery.

He is a famous nuclear physicist in his home country, and he has a great deal of knowledge about his own illness, to some extent, far surpassing that of his physicians. He is very keen on knowing what is going on with his care. However, the medical team during the past 3 weeks has approached his illness with a focus on symptom management and psychological care.

When I entered the room, his lunch tray was left un-eaten, and he was lying in bed without moving a muscle with a grimaced, reddened face. I asked what the problem was. He said: 'It hurts too much'. I offered him pain medication to which he said that he did not want it since it doesn't seem to help any.

In fact, he has been on a placebo pain control protocol. The team believed that this was effective and was continuing to use it.

I asked how bad the pain was. He described it as burning sensation that would be felt if one burned acid on skin.

I left the room quietly as I did not know what to say, feeling somewhat guilty and ambivalent about the placebo therapy. I approached the attending physician at the nurses' station, explained the situation, and obtained an order for demerol. I gave the demerol without telling Mr K that this was a different medication. I just said that I hoped this would help his pain. One hour after the medication, Mr K came to the nurses' station and thanked me for the relief and asked me about the medication. At this point I couldn't say any thing to him, and I didn't and just smiled.

The analyses

As a result of the analysis of the descriptive phase of this narrative, the researcher, the nurse and a small sub-group of the participants engaged in the process of sharing, discovered the following points: the nurse's thoughts included the ideas that the patient was experiencing genuine pain, the placebo therapy is ineffective, and there is a need for pain relief; the nurse's feelings included guilt, ambivalence, uneasiness and discomfiture, and helplessness; and the nurse's actions included observation of the situation, pain assessment and inferences about the pain experience, convincing the physician to change from the agreed protocol, delivery of pain medication, quiet movements, and silence about new medication. The narrative was rich in illustrating the clinical situation; however, there was a lack of description as to exactly how the nurse was able to obtain a new pain medication order from the physician. The researcher's role in this phase is to assist narrators to be more detailed and comprehensive in describing thoughts, feelings and actions.

For the analyses of the reflective phase, the following espoused theories specific to the situation were identified by the narrator-nurse and the group: (a) patients have both physical and psychological needs, and nursing approaches should address both; (b) pain may have both physical and psychological origins; (c) patients should be honestly informed of their treatment plans; and (d) patients should be respected for their worth as individuals. The reflective process relating to espoused theories revealed that the nurse was able to carry out the scientific aspects of practice in an effective manner by questioning the validity of the team decision regarding the pain control protocol and obtaining medication that worked for the patient. However, the analyses of the nurse's actions from the ethical and aesthetic perspectives indicated that while she was able to uphold one set of beliefs by being courageous and advocating, she was not able to move against the convention of the clinical setting and the culture in general where 'telling patients all' was not the norm. The analysis regarding reflection on the situation indicated three points that were critical in moulding what aspired in this instance: (a) the narrator-nurse was an experienced head nurse who was well-informed about the patient prior to this event, and who had considerable power and credibility in her relationships with physicians; (b) there was an uncertainty regarding the goals of therapy for this patient, and the physiological basis for pain was being questioned; and (c) the nurse did not expect the patient to question about the medication directly and was not prepared to handle this query from the patient, although she was aware that the patient was self-deterministic and well-informed. The ethical and aesthetic dilemmas experienced by this nurse were heightened by these situational factors. In fact, the nurse may not have experienced such dilemmas if it were not for the patient asking about the medication. The analysis regarding the reflection on intentions was not complicated in this situation because of the single focus on intensions, that of pain relief, which was carried through with actions.

The critical/emancipatory phase of the inquiry involved dialogue among the researcher, the narrator-nurse and the group members, questioning the nurse's positive actions

involving courage and conviction and the negative feelings of uneasiness, discomfiture and helplessness. This dialogue was helpful in moving not only the narrator-nurse but her colleagues towards self-emancipation, especially regarding the heightened awareness about possible conflicts between ethical/aesthetic beliefs and the situational routines and conventions. This dialogue also revealed the need to involve physicians and nurses on this unit and throughout the hospital in a communal emancipatory process regarding the philosophy and protocols about information disclosure to patients, so that there could be cultural change as well as individual changes.

DIFFERENT APPLICATIONS OF THE METHOD

There are three different ways of applying the critical reflective inquiry in nursing, oriented to knowledge development, improvement of individual practice, and shared learning.

1. This inquiry is applicable as a method of research to generate new knowledge through the investigation of knowledge embedded in practice. As indicated earlier, models of 'good' practice, theories of application, and knowledge about the process of practice, can be gained by systematic analysis of practice-narratives. Knowledge gained through the study of practice-*in-situ* can add greatly to the knowledge in the practice domain of nursing (Kim 1994b). Furthermore, such knowledge can be used by practitioners as guide-posts for their practice.
2. This method can be adopted in practice situations and in nursing education by nurses and nursing students as a way to improve practice. Application of this three-phase process in practice can lead practitioners to avoid harmful ritualization and be in a learning mode in practice. In order for nurses to engage in this inquiry it is necessary to have a researcher or an experienced mentor to assist with the process during an initial stage. For nursing students, clinical faculty could be trained to lead them in this process as a method of teaching clinical nursing. As nurses internalize the critical reflective culture of nursing practice and become competent in incorporating the critical reflective inquiry in their daily practice, there may not be a need for a mentor or a researcher to assist with the process.
3. The third area of application is for shared learning. It was evident in the project carried out in Korea that this method of inquiry can be used as the basis for conducting clinical conferences (patient-care conferences) in clinical settings. Clinical conferences in nursing tend to be patient-oriented or problem-oriented in general rather than event-oriented. Although such conferences are valuable in investigating nursing issues in the care of patients being discussed and developing nursing care plans, there is much to be gained by using critical reflective inquiry as the basis for conducting weekly (or periodical) conferences for shared learning among nursing staff. The purpose of critical reflective inquiry conferences will be to analyse, dialogue about and learn from various aspects of practice. In order for such conferences to be successful, it is necessary to ready the staff for self-exposure and honesty and prepare them in the skills associated with narrative writing, reflective analysis and critique. Nurses would need to embrace the philosophies of action science, reflective practice and critical philosophy.

CONCLUSION

The outcome of this method of inquiry is first of all to help clinicians to be reflective and critical in their practice, and become astute in identifying good practice versus ineffective practice. In addition, it is possible to develop and generate knowledge that emerges from practice. Furthermore, it is a method of changing and correcting professional practice in an on-going fashion.

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