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The invisible work of the district nursing team: methodological problems associated with exploring skills

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This paper begins by identifying the context and extent of grade-mix changes in the district nursing service, drawing attention to significant dilution in grade mix at a time of considerable organizational change. The paper goes on to argue that there is no easy formula for providing sound evidence on which policy and management decisions about grade mix can be based. It suggests that the focus on tasks in much of the research on district nursing does not offer a sufficient basis for making grade-mix decisions, because nursing skills are not made explicit. The paper then makes reference to one ethnographic research study in order to illustrate and explore some of the methodological difficulties associated with trying to provide evidence of the use of district nursing skills, focusing in particular on the invisible work undertaken by team members. The paper concludes that if differences in the use of skills by different grades of nurse can be identified, then further increases in grade dilution will have consequences for patient care and must therefore address issues of quality in order to comply with the principles of clinical governance.

Key words: district nursing; grade mix; methodology; nursing skills; skill mix

Introduction

Over the last 10 years, changes to the grade and skill mix within the nursing service have generated considerable debate (Hancock, 1992; Lightfoot, 1994; McKenna, 1995; Rapport and Maggs, 1997). Arguments in favour of grade mix include cost-effectiveness in the use of scarce resources, matching skills to patients' needs, flexibility in meeting increased demand for nursing care and, in the case of community nursing, a release of the specialist district nursing sister for care planning and team management (NHS Management Board, 1986; Ball *et al*., 1989; Gibbs *et al*., 1991). However, what is lacking is a rationale for the changes in grade mix which have occurred (Lightfoot *et al*., 1992). This paper aims to highlight the difficulties in providing the evidence for such a rationale, and it will explore the methodological difficulties encountered in one research study which attempted to provide evidence of the use of district nursing skills. The central focus of the research was the 'invisible work' undertaken by district nursing team members. The term 'invisible' refers to the cognitive, interpersonal and managerial processes within nursing care.

Background

The nursing care of patients in the community requires a wide range of skills as well as the ability to work alone and unsupervised for considerable periods of time (Bramadat *et al*., 1996). The challenge of ensuring that patients' needs are met and that appropriate and high-quality care is given in a diverse range of domestic circumstances is the responsibility of the G-grade district nursing sister (i.e. a nurse with the specialist qualification), who

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has at her disposal a nursing team of qualified and unqualified nurses. Her team may consist of nurses with up to four distinct levels of professional preparation, occupying posts graded at five levels which reflect different responsibilities and, of course, different levels of remuneration.

Over the past 10 years the balance of grades has changed, and in Scotland, for example, between 1990 and 1996 there has been a reduction in the proportion of G-grade district nursing sisters in the work-force from 55% to 45%, and a rise in the proportion of nursing auxiliaries from 19% to 24% (Information Statistics Division, 1996). Grade-mix changes in England and Wales are more difficult to establish, but the Audit Commission Report (Audit Commission, 1999) states that evidence from its study sites shows that the proportion of staff at G and H grades declined from 38% to 35% of total staffing, while the proportion of staff at grades D, E and F increased from 41% to 45% of the workforce. District nursing sisters have therefore had to adapt to leading teams which contain more nurses without specialist qualifications and more unqualified staff.

These grade-mix developments have occurred in parallel with organizational change, policy initiatives and technological developments which together have radically altered the circumstances in which patients are treated and cared for (Rapport and Maggs, 1997; Jenkins-Clarke *et al*., 1998). The average length of patient stay in hospital is at an all time low, more complex technology is being introduced into the home in support of care, emphasis has been placed upon a primary care-led NHS, and social care of the elderly infirm has burgeoned (Department of Health, 1997; Latimer and Ashburner, 1997; Scottish Office Department of Health, 1998). There has been little acknowledgement of the potential consequences of these grade-mix changes for the current context of patient care.

The question of what constitutes an appropriate range of skills within the district nursing team is therefore of central importance. However, providing the evidence for how skills link to grades and what the consequences are for grade-mix decisions is not easy (Davison and Pearson, 1994). One of the central problems has been the focus on tasks and workload, rather than on skills, in the majority of district nursing research studies (Hockey, 1966; McIntosh and Richardson, 1974; Dunnell and Dobbs, 1982; NHS Management Executive, 1992; Cartlidge and Harrison, 1995; Jenkins-Clarke *et al*., 1998). These studies have used predominantly survey methods, including work diaries, activity sampling and structured observation. The Value for Money Unit report on skill mix, in particular, demonstrated how activity sampling with a focus on tasks fails to account for the range of skills which are used in district nursing (NHS Management Executive, 1992). The report provoked a considerable debate which drew attention to the complexity and range of skills used in district nursing, the need to match skill with patient need, the holistic nature of care given to patients, and the fact that the observable task represents only one constituent of nursing activity (Cowley and Mackenzie, 1993; Royal College of Nursing, 1993; Goodman, 1996).

In summary, increasing grade dilution in the district nursing service has occurred at a time of increasing demand for patient care in the community, and the impact of such changes on the quality of patient care is unknown. It has been argued that a focus on tasks alone fails to capture the skills which district nurses use, and therefore it is difficult, if not impossible, to provide evidence of what constitutes an appropriate skill mix for the nursing team. This lack of evidence for the use of skills formed the rationale for a study of the use of skills within the district nursing team. Hence the primary research questions were as follows.

1) What is the nature and range of skills used by members of the district nursing team?
2) Do different grades of nurse use the same or a different range of skills?
3) How is the use of different skills related to the meeting of patient need?

Understanding the meaning of the term 'skill'

The first challenge in a research study focusing on the use of skill is, of course, to define the meaning of the term 'skill'. It is surprising that, in nursing, a skill-based profession, the professional and academic discourse reveals a lack of clarity in the use of the term. There are a number of ways in which this occurs. For example, the notion that particular nursing 'tasks' require particular nursing skills is

widespread in the literature on skill mix, as Gibbs *et al*. (1991) explain:

> the issue at the heart of skill mix from a managerial or pragmatist point of view is the need to identify those nursing tasks which require a professional qualification (usually for the more technical aspects of nursing) and to allow less or unqualified people to undertake other more basic tasks. (Gibbs *et al*., 1991: 247)

The notion of a 'hierarchy of tasks' which needs to be matched with an associated 'hierarchy of skills' is also in evidence:

> staffing the task system requires a hierarchy of skills provided by those with specialist training and a formal qualification (registered and enrolled nurses) and those not in possession of nursing qualifications (auxiliaries). (Carr-Hill *et al*., 1992: 7)

The perception that certain nursing tasks require specific levels of skill is very common, particularly among non-nurses and managers. However, for a number of reasons this perception is not helpful for elucidating the complexity and range of nursing skills required in community nursing.

First, it is rarely possible to disaggregate nursing care in the home into individual nursing interventions. A patient's care often requires a number of different nursing interventions, each of different complexity. Thus during the course of a visit by a member of the district nursing team the patient will need to be cared for by the nurse who has sufficient skill not simply for one nursing intervention but for all the care which has to be given (Luker and Kenrick, 1992; Cowley and Mackenzie, 1993; Bramadat *et al*., 1996).

Secondly, to use the terminology of the literature, the nursing 'task' may reflect one aspect of patient need (e.g. to receive insulin), but it gives absolutely no indication of the other patient needs, such as the need for information, advice or counselling, or perhaps carer support. Thus the notion of linking a skill level to a task overlooks a number of additional skills which are required to fulfil these other activities, so denying the possibility that several skills can be used simultaneously, and that they may be used together in an integrated way.

Thirdly, the notion of a hierarchy of tasks and skills completely disregards the hidden or invisible skills such as risk assessment, judgement and decision-making which are required, at least for a proportion of the time, in order to enable care to be planned, delegated safely and subsequently evaluated (Goodman, 1996).

Given this lack of clarity about the use of the term 'skill', it was decided, for the purposes of the study, to adopt a framework of different 'skill domains' which were referred to intermittently in the literature and which were confirmed within the personal community nursing experience of the research team (Burnard, 1989; Royal College of Nursing, 1992; Cowley and Mackenzie, 1993; Goodman, 1996). The proposed domains outlined below formed the first building block of the study design.

Suggested domains of nursing skills

These were as follows:

- practical skills – any actions which require psychomotor ability;
- interpersonal skills – actions that involve listening, talking and body language;
- observation skills – actions that involve noticing, watching, hearing, smelling and feeling;
- cognitive skills – a complex group of thinking processes including selection, discrimination, interpreting, predicting, risk assessment, planning, evaluating, making judgements and making decisions;
- managerial skills – actions involving liaison, care planning, recording, ordering, teaching and supervision, teamworking, delegating, motivating and allocating resources.

Although such a framework is a useful start, it presents a considerable challenge in terms of developing the overall research design and methods. The research team identified the following problems which needed to be addressed.

Problems in exploring skills in practice

First, as explained above, it is difficult to conceive of a single skill being used on its own. The challenge for the research team, therefore, was how to capture skills from different domains which were

being used in combination. A related point is that certain interpersonal skills are highly complex in themselves and could be described as skills within skills (Burnard, 1989). For example, negotiating skills may involve listening, giving and seeking information, advising, explaining and persuading. Thus the research methods need to accommodate the use of multiple skills, of which one constant strand will be interpersonal skills. Moreover, the means of identifying the more complex interpersonal skills such as negotiation present greater challenges methodologically, due to the fact that interaction may be differentially interpreted both by the participants and by the researcher (Swanick, 1994).

Secondly, there is the challenge of exploring cognitive processes, which constitute one of the key aspects of nursing practice which may be more highly developed as a consequence of specialist professional preparation (VanLehn, 1996). It is crucial to try to find ways of providing evidence of the use and value of cognitive skills, because this may hold one of the keys to differentiating between different groups of nurses and providing a basis on which a more informed approach to grade mix can be developed. The challenge is well exemplified in Luker and Kenrick's (1992) work on decision-making in district nursing.

Thirdly, there may be a problem in identifying the temporal aspects of care, namely those interventions where there is an intent to achieve some goal over a period of time, but at such a slow pace as to be unidentifiable in the course of a few visits (Carr, 1999).

In summary, the challenges confronting the research team included the use of multiple skills, the possibility that interaction is subject to different interpretations, the fact that skills transcend grade boundaries, and finally the fact that skills include invisible cognitive processes and an element of temporality. A qualitative approach to data collection was indicated due to the complexity of practice to be explored. However, it needs to be asked what particular qualitative approach would be best suited to the study aim, and what methods would meet the challenges outlined.

Meeting the challenges: an ethnographic approach?

It was clear that the research questions outlined above required a range of data sources and that there had to be a clear focus on the identified skill domains. This would require the researchers to enter the 'world' of the district nursing team, to watch what they did, listen to what was said and ask questions about what was seen and heard. However, while understanding 'culture' is said to be the principal goal of ethnography, it has to be acknowledged that the 'cultural focus' in this study was limited to the central concerns relating to the use of skills (Hammersley and Atkinson, 1995). Such a focus has also been noted in other studies of district nursing work which have used an ethnographic method, namely the focus on patient and client 'need' in the study by Ong (1991), and the response of primary health care professionals to change in the community reported by Rapport and Maggs (1997).

Consistent with an ethnographic approach, observation of nurses working in the 'natural setting' of the home was regarded as central (May, 1997). As other studies of district nursing have shown, observation of the home visit offers one of the best opportunities to explore the use of a wide range of skills employed by district nurses (Kratz, 1978; Coombs, 1984; Smith *et al.*, 1993; Baillie, 1995). However, it was acknowledged at the outset that, in order to maximize the capacity of the study to provide insight into the skills used by members of the district nursing team, the research would have to embrace different grades of nurse, different configurations of nursing team and also different Health Board/Health Authority settings. Each of these may or may not influence the everyday routine use of skill (Hammersley and Atkinson, 1995). The study would therefore involve a very considerable amount of data collection, and more than one researcher would be required to manage the data collection and analysis. A team of three researchers was available to undertake the study, and the benefits of team research include researcher 'triangulation', whereby data collected and interpreted by different researchers can be compared. Such comparison, where it yields either commonalities or differences in findings and interpretation, helps to highlight the credibility and transferability of the research (Sandelowski, 1986; May, 1997).

Observation: strengths and limitations

The limitations of observation include the fact that nurses might try to present their practice in the best

possible light, as well as the possibility that the presence of an observer changes the interaction between nurses and patients in such a way as to reduce the opportunities for nurses to use certain interpersonal skills (Endacott, 1994). In addition, during the observation period there is likely to be a restriction on the number and range of patients' nursing care problems which it is possible to observe, and therefore a potentially narrow provision of opportunities for demonstrating skill.

However, it is now generally recognized that observation does not necessarily lead to a distortion of practice. A number of researchers who have used observation confirm that research participants very quickly become accustomed to the presence of the observer and appear to act normally (Field and Morse, 1987; Swanick, 1994). Although it is unlikely that the direct care which is given will be affected by an observer, it must be acknowledged that patients may choose not to raise problems of an intimate nature in the presence of a third party. Thus opportunities for noting how nurses respond to such problems may be missed. It is also the case that the research observer may be intermittently drawn into the conversation, and that this may alter the course of any interaction (Mason, 1996). It was therefore decided that the team would adopt non-participant observation, and attempt to place themselves in as unobtrusive a position as possible in order to minimize involvement in and direct influence on interaction between nurse and patient. It was also agreed that nurses would be asked whether they thought that the presence of the observer had changed the nature of the routine visit and, if this was the case, in what way it had done so. These data could be used together with the researchers' fieldnotes on their own reactions and developing understanding of nursing work, in order to remain attuned to the reflexive character of ethnography (Hammersley and Atkinson, 1995).

Combining interviews with observation

Observation alone cannot capture cognitive processes, but it does provide the researcher with important cues relating to such processes which can be pursued by other means. A combination of observation and interview was the solution to exploring this difficult area, by seeking participants' views on the use of skills which had been observed and how these related to patient needs. This could be achieved by asking participants to explain their thoughts, actions and interactions in relation to the care given to patients, and by engaging them in a reflective dialogue in order to explore the thinking activity behind nursing practice. It was hoped that the use of real examples of care which had been observed would help to overcome some of the difficulties experienced by other researchers in encouraging nurses to unravel their cognitive processes (Luker and Kenrick, 1992; Meerabeau, 1992).

However, there is also an inherent problem in using interviews in which reliance is placed on self-report of cognitive activity. It has to be acknowledged that perceptions of actions and the thinking that underpin them may reflect an exaggerated or biased account of what actually occurred in the mind of the nurse. While it is difficult to provide evidence which incontestably identifies these invisible processes, the use of both observation and interview combined should guard against serious distortion. Any account of mental activity would have to correspond closely to the context of care and the actions taken within it, both of which have been observed, albeit for a limited period of time.

The decisions about the balance between observation and interview were determined by the need to try to capture the nurses' cognitive processes relative to the patients' needs and problems. In other words, the researchers needed to share the nurses' knowledge, perceptions, judgements, uncertainties and decisions relating to the patients whose visits were going to be observed. In order to enhance the capacity of the study to yield insights into these complex processes, it was decided to seek to interview the nurses both before and after each observation session. This is consistent with the ethnographic approach in the sense that the researchers could check out their own understanding of what had occurred during the home visit (May, 1997). This understanding and insight was further developed and refined through the medium of research notes which were made during regular meetings between research team members. Together with fieldnotes made during the time spent with the teams, this constituted a reflexive account of the research as it progressed.

There is a further issue which requires consideration. Certain patients who are seriously ill, or who

require complex care, may be visited exclusively by the senior members of the nursing team, while those patients who are in a more stable state and require care of a more personal nature, may be visited predominantly by more junior or unqualified members of the team. This may of course represent important evidence about the use of skill, but it could also lead to an interpretation of the use of skill which reflects delegation practice rather than the intrinsic skill level of individual nurses. While it is important for the study to capture these different patterns of team visiting, it is equally important to provide a valid way of identifying differences between different grades in order to address research question (2) above. What is required, therefore, is a 'level playing field' in the sense of an equality of opportunity for demonstrating the use of skills. Some means had to be found of targeting observations to provide this 'equality of opportunity' to use nursing skills.

The solution to this methodological problem was to ensure that some of the observation was arranged in such a way as to include visits to patients who were cared for by all or several members of the team. This would allow the research team to observe nurses working in situations where the patient care needs, and the nursing care given, offered an identical opportunity for skill use, irrespective of grade. The limited number of such visits was regarded as the only means of validating any differences between the different grades of nurse which may be uncovered during the course of the other observation sessions.

Study design

Having selected the research approach and methods, the final challenge was to decide on the precise research design. How could the two methods be used to address the research aims? The final research design evolved as the research team engaged in three different types of exploratory pilot work. These included the use of a group of practitioners representing all grades within the team to review and comment on the proposed methods, observation sessions and semi-structured interviews.

A central concern at this exploratory stage was how to record data during the course of the observation sessions. Such recording may range from the use of a highly structured schedule to a much less structured or even unstructured account or fieldnotes. The research team attempted structured observation of visits in order to try to capture the full richness of the nurse–patient encounters, but this proved to be too taxing. Therefore the ethnographic approach of fieldnotes consisting of 'relatively concrete descriptions of social processes and their contexts' was adopted (Hammersley and Atkinson, 1995: 175).

Following a trial of this approach, it was found to be possible to identify the use of multiple skills and to capture some of the more elusive skills such as observation, as nurses will articulate these and discuss them with patients during the course of giving care. This was possible because the use of practical nursing skills (e.g. doing a dressing) usually occupies a longer time span than the topics of discussion which take place between the nurse and the patient during the course of giving care.

Despite a degree of optimism that this combination of methods would provide sufficient scope for identifying a wide range of skills in use, doubts about the possibility of capturing data on interpersonal, cognitive and managerial skills remained, due to the complexity of visits and the twin focus on action and interaction. Moreover, the precise means of targeting patients who were cared for by all team members had yet to be resolved. In short, there was a need to increase the capacity of observed visits to yield insights into cognitive and interpersonal skills, as well as the potential differences in the use of skills by nurses working at different grades.

In an attempt to overcome these challenges, two further features of research design were incorporated into the study. First, it was decided that the research team would record fieldnotes in a general way for all patients visited, but that special attention would be given to one patient who would be pre-selected by the researcher before the observation began. It was hoped that more intensive recording of action and interaction could be achieved if this was undertaken for a time-limited part of the observation period. The selected patient was termed the 'focus' patient, and selection was made on the basis that the patient had complex needs and that they were visited by all members of the district nursing team. Deliberate selection of a patient with complex needs was made in order to provide an opportunity to identify how the different members

of the team would respond to the challenges posed by such a patient. For example, the patient might require psychological support, their condition might be prone to occasional deterioration, and there would be a potential requirement to address carers' needs. 'Focus' patient visits therefore provided the twin advantages of intensive recording by the research team and the opportunity to gain insight into the differential use of the skill domains by nurses working at different grades.

After having finalized the approach to observation and undertaken exploratory pilot work, it was decided that each observation session with a member of the team should last for a full morning. The morning's work encompassed both routine visits and visits to patients who were more seriously ill, and it therefore offered sufficient scope for observing a range of skills in use. Longer periods of observation with the nurses were ruled out because it was considered that an observation session together with intensive questioning already constituted a significant burden on practitioners.

As mentioned above, the interviewing took place both before and after the morning's observation session in order to provide opportunities for detailed probing of the care given to patients in general and to the 'focus' patient in particular. A pre-observation interview might, for example, reveal a nurse's concern that a carer was not fully coping with the care of their relative. The researcher would then attend carefully to any exchanges relating to this problem, observing the interaction between nurse, patient and carer in order to identify the strategies which the nurse used, and the carer's response to these. The post-observation interview provided an opportunity for discussion and interpretation of events or interactions that occurred during the visit. It was clear that interview and observation sessions needed to be arranged as close together as possible in order to maximize recall. Accordingly, the pre-observation interview was undertaken during the late afternoon prior to the observation session the following day, while the post-observation interview took place immediately after the morning's visits. The post-observation interview was also followed, where possible, by researcher observation of the team meeting and administration time in order to provide an opportunity to collect data on managerial skills.

The advantage of pre- and post-observation interviews was that they provided the opportunity to collect data on nurses' perceptions of the context of care, the temporal aspects of care, the circumstances of each individual patient and the nursing team dynamics. Moreover, the researcher would have the opportunity to check the nurse's views of her intended actions against the actual process of the visit, as well as researcher interpretation of what had occurred. It was hoped that this combination of two interviews and observation would address most of the anticipated difficulties, filter out misinterpretation and reduce the likelihood of a failure to note the skills used. Thus both 'method' or 'technique' triangulation and researcher triangulation were used in order to provide access to invisible cognitive processes and to enhance the validity of the study (Hammersley and Atkinson, 1995).

One final problem associated with the observation and discussion of the use of skills was identified during the early stages of the pilot work. Although the researchers observed multiple skills in use, some nurses either did not always identify them in the same degree of detail, or else they tended to couch them in terms of the care given – for example, 'general nursing care'. To circumvent this problem, a 'skills diagram' was developed using the work of Coomber *et al*. (1992) in Newcastle. Essentially, a range of skills from the five domains were included in the diagram, and at the end of the post-observation interview, after having an unprompted opportunity to discuss the skills used, the nurse was invited to use the diagram as a basis for identifying any other skills which she considered had been used during a particular visit, supporting her comments with examples from the visit. There is a risk that research participants might select all the skills which they believe should have been employed, but the researcher's presence would act as a check, and queries could be raised if the nurse's selection of skills from the diagram represented an over-generous picture of what the researcher had observed.

Decisions about sampling need to be both systematic and transparent (Reed *et al*., 1996). Accordingly, a number of factors influenced the sample selection. First, it was necessary to include several members of each grade of nurse. However, rather than inviting equal numbers of each grade to participate, it was considered more important to reflect the real world of community nursing teams and to include whole teams within the study so

that the team approach to the use of skills could be explored. Furthermore, it was considered essential to ensure that different patterns of grade mix within teams were included, so that the effects of a narrow or broad mix of grades could be highlighted. Finally, the decision was taken to observe nurses working in different Health Board settings in order to identify whether there were important organizational factors influencing the use of skills. The team of three researchers offered a unique opportunity to incorporate all of these considerations into the sample selection, which finally consisted of 76 members of 21 district nursing teams from two different Health Board areas in Scotland.

In order to gain access to district nursing teams, a letter outlining the study and inviting participation was sent to all members of each team. The letter explained the background to the interest in nursing skills, and informed the recipients that managerial permission to approach them had been given and also that approval had been obtained from the Ethical Committee. Once interest in the study had been expressed by the team, a meeting was held between the team and the researcher in order to discuss the study in more detail and to explain the study methods. The response to these invitations was good, and the majority of the nurses regarded the study as an opportunity to demonstrate their skills. Only two out of 23 teams that were approached declined to take part.

Discussion

This paper has detailed a methodological approach to the study of nursing skills which is very different from that traditionally undertaken by researchers in this field (Carr-Hill *et al*., 1992; NHS Management Executive, 1992; Jenkins-Clarke *et al*., 1998). Previous studies have used predominantly quantitative methods, possibly driven by the need to provide generalizable results for managers and policy-makers. The limitations of such studies include a tendency to focus on tasks or activities rather than on skills, and a failure to capture the use of multiple skills being used in an integrated way. Such studies also pay little or no attention to cognitive skills and the majority of interpersonal skills. Moreover, they ignore the temporal and team aspects of skill use. This limited or partial view of skills runs the risk of diminishing the contribution of the specialist nurse, and may unintentionally promote an uncritical move towards further grade dilution.

However, the extent to which managers and policy makers can be persuaded to listen to and act upon qualitative research findings on the use of nursing skills is a moot point. As Meerabeau (1996: 635) has argued, if research findings appear 'complex and difficult to interpret', if they are directed at developing understanding rather than providing readily identifiable conclusions, then policy-makers might not be convinced of their utility. Moreover, if the message conveyed by the findings does not fit with current policy concerns or support the drive for cost containment, then it is likely to be ignored (Meerabeau, 1996). For example, it has to be acknowledged that simply making skills 'visible' does not in itself provide evidence of the value of the work of district nursing team members or the importance of their skills to patient outcomes. However, if the study can show that a broader range and more complex types of skills are used by certain members of the team, then it is argued that the consequences of reducing the capacity of the nursing team to use such skills must have consequences for patient care. This potential finding would then place the burden of proof for further skill dilution firmly on managers.

It is hoped that this paper has identified how difficult this burden of proof could be. In outlining the scope and complexity of the nursing skills used within the district nursing team, and in defining some of the methodological problems associated with exploring them, it is hoped that there will now be a healthy scepticism about the more simplistic approaches to the study of skill and grade-mix. The district nursing team has experienced grade dilution to a much greater extent than other professionals in primary health care. The fact that they absorb a considerable proportion of a Community/Primary Care Trust's budget has undoubtedly played a role in this, because grade dilution can achieve significant savings, as the Value for Money Report recommendations showed (NHS Management Executive, 1992). However, in the current climate of clinical governance it could be argued that incremental grade dilution is no longer acceptable unless it is based on sound evidence that there are no negative consequences for patient care (Department of Health, 1997; Scottish Office Department of Health, 1998). It will

undoubtedly be as problematic and difficult to produce evidence to support grade dilution as it has been to challenge it.

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References

Audit Commission 1999: *First assessment: a review of district nursing services in England and Wales*. London: Audit Commission.

Baillie, L. 1995: Ethnography and nursing research: a critical appraisal. *Nurse Researcher* 3, 5–21.

Ball, J. A., Hurt, K., Booth, M. R. and **Franklin, R.** 1989: '*But who will make the beds?*' *The Report of the Mersey Region Project on Assessment of Nurse Staffing and Support Worker Requirements for Acute General Hospitals*. Leeds: Nuffield Institute for Health Service Studies and Mersey Regional Health Authority.

Bramadat, I. J., Chalmers, K. and **Andrusyszyn, M. A.** 1996: Knowledge, skills and experience for community health nursing practice: the perceptions of community nurses, administrators and educators. *Journal of Advanced Nursing* 24, 1224–33.

Burnard, P. 1989: *Teaching interpersonal skills. A handbook of experiential learning for health professionals*. London: Chapman and Hall.

Cartlidge, A. and **Harrison, S.** 1995: Nursing activities of district nursing sisters and practice nurses in selected practices in a family health services authority in Northern England. *Social Sciences and Health* 1, 63–72.

Carr, S. M. 1999: *Experiencing practice: an exploration of the constructed meaning of nursing in the community*. Unpublished PhD Thesis, University of Northumbria at Newcastle, Newcastle upon Tyne.

Carr-Hill, R., Dixon, P., Gibbs, I. *et al*. 1992: *Skill mix and effectiveness of nursing care*. York: Centre for Health Economics, University of York.

Coomber, R., Cubbin, J., Davison, N. and **Pearson, P.** 1992: *Nursing skill mix review*. Newcastle upon Tyne: Newcastle Community Health, Newcastle General Hospital.

Coombs, E. M. 1984: A conceptual framework for home nursing. *Journal of Advanced Nursing* 9, 157–63.

Cowley, S. and **Mackenzie, A.** 1993: *Nursing skill mix in the District Nursing Service. Newsletter Vol. X* (spring). London: District Nursing Association.

Davison, N. and **Pearson, P.** 1994: Sensitivity and care: vital tools for skill mix review. *Nursing Times* 90, 38–9.

Department of Health 1997: *The new NHS: Modern, dependable*. London: The Stationery Office.

Dunnell, K. and **Dobbs, J.** 1982: *Nurses working in the community*. London: HMSO.

Endacott, R. 1994: Objectivity in observation. *Nurse Researcher* 2, 30–40.

Field, P. A. and **Morse, J. M.** 1987: *Nursing research. The application of qualitative approaches*. London: Croom Helm.

Gibbs, I., McCaughan, D. and **Griffiths, M.** 1991: Skill mix in nursing: a selective review of the literature. *Journal of Advanced Nursing* 16, 242–49.

Goodman, C. 1996: District nursing and the National Health Service reforms: a case for clarification. *Journal of Nursing Management* 4, 207–12.

Hammersley, M. and **Atkinson, P.** 1995: *Ethnography principles in practice*, 2nd edn. London: Tavistock Publications.

Hancock, C. 1992: *Nurses and skill mix: what are the issues?* London: Royal College of Nursing.

Hockey, L. 1966: *Feeling the pulse: a study of district nursing in six areas*. London: Queen's Institute for District Nursing.

Information Statistics Division 1996: *Scottish Health Statistics, 1996*. Edinburgh: Information Statistics Division.

Jenkins-Clarke, S., Carr-Hill, R. and **Dixon, P.** 1998: Teams and seams: skill mix in primary care. *Journal of Advanced Nursing* 28, 1120–26.

Kratz, C. 1978: *Care of the long-term sick in the community*. Edinburgh: Churchill Livingstone.

Latimer, J. and **Ashburner, L.** 1997: Primary care nursing: how can nurses influence its development? *Nursing Times Research* 2, 258–67.

Lightfoot, J., Baldwin, S. and **Wright, K.** 1992: *Nursing by numbers? Setting staffing levels for district nursing and health visiting services*. York: Social Policy Research Unit, University of York.

Lightfoot, J. 1994: Demonstrating the value of health visiting. *Health Visitor* 67, 19–20.

Luker, K. A. and **Kenrick, M.** 1992: An exploratory study of the sources of influence on the clinical decisions of community nurses. *Journal of Advanced Nursing* 17, 457–66.

McIntosh, J. and **Richardson, I. M.** 1974: *Work study of district nursing staff*. Scottish Health Studies No. 37. Edinburgh: Scottish Home and Health Department.

McKenna, H. P. 1995: Nursing skill mix substitutions and quality of care: an exploration of assumptions from the research literature. *Journal of Advanced Nursing* 21, 452–59.

Mason, J. 1996: *Qualitative researching*. London: Sage.

May, T. 1997: *Social research: issues, methods and process*, 2nd edn. Buckingham: Open University Press.

Meerabeau, E. 1992: Tacit nursing knowledge: an untapped resource or a methodological headache? *Journal of Advanced Nursing* 17, 108–12.

Meerabeau, E. 1996: Managing policy research in nursing. *Journal of Advanced Nursing* 24, 633–39.

NHS Management Board 1986: *Mix and match: a review of nursing skill mix*. London: HMSO.

NHS Management Executive 1992: *The nursing skill mix in the district nursing service*. London: HMSO.

Ong, B. N. 1991: Researching needs in district nursing. *Journal of Advanced Nursing* 16, 638–47.

Rapport, F. and **Maggs, C.** 1997: Measuring care: the case of district nursing. *Journal of Advanced Nursing* 25, 673–80.

Reed, J., Procter, S. and **Murray, S.** 1996: A sampling strategy for qualitative research. *Nurse Researcher* 3, 52–68.

Royal College of Nursing 1992: *Powerhouse for change. Report of the Task Force on Community Nursing*. London: Royal College of Nursing.

Royal College of Nursing 1993: *District nurses and value for money: an RCN response*. London: Royal College of Nursing.

Sandelowski, M. 1986: the problem of rigor in qualitative research. *Advances in Nursing Science* 8, 27–37.

Scottish Office Department of Health 1998: *Designed to care. Renewing the National Health Service in Scotland*. Edinburgh: The Stationery Office.

Smith, P., Mackintosh, M. and **Towers, B.** 1993: Implications of the new NHS contracting system for district nursing. *Journal of Interprofessional Care* 7, 115–24.

Swanick, M. 1994: Observation as a research method. *Nurse Researcher* 2, 4–21.

VanLehn, K. 1996: Cognitive skill acquisition. *Annual Reviews in Psychology* 47, 513–39.