TITLE

AN EVALUATION OF AN EDUCATIONAL PROGRAMME TO PREPARE FAMILY HEALTH NURSES

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ABSTRACT

In 1998 the World Health Organisation (WHO) Europe proposed a new type of community based nurse called the Family Health Nurse (FHN). Although it was initially envisaged that 18 European countries would take part in the development of the FHN role through parallel processes of education and implementation, Scotland has been significantly ahead of other countries in enacting this plan. A pilot project involving community nurses from four remote and rural regions of Scotland was conducted between 2001 and 2003. A Scottish University was commissioned to provide a degree -level course for registered nurses with a minimum of two years post-registration qualifying experience. This paper summarises the main findings and issues arising from an external research evaluation of this educational programme.

The programme was found to differ substantially in focus and format from other specialist community nursing programmes available in Scotland. Moreover there were key differences from the curriculum proposed by WHO Europe, in that there was more grounding in North American family nursing models and less focus on management and leadership. This customised degree programme provides a precedent for other educational providers in the UK to reconsider their approach to specialist practice degree level education.

Keywords: *Family Health Nurse; evaluation; educational programme*

INTRODUCTION

In 1998 the World Health Organisation (WHO) Europe proposed a "new type of nurse" called the Family Health Nurse (FHN). The envisaged role of the FHN was multifaceted and included helping individuals, families and communities to cope with illness and to improve their health. An educational curriculum (WHO Europe 2000) was proposed which aimed to develop each FHN to become competent in the following five core functions: care provider; decision maker; communicator; community leader; manager. Key features of the curriculum are summarised in Table 1.

Although it was initially envisaged that 18 European countries would take part in the development of the FHN role through parallel processes of education and implementation, Scotland has been significantly ahead of other countries in enacting this plan. The Scottish Executive Health Department (SEHD) saw the FHN role as a potential solution to some of the problems of providing health care in Scotland's remote and rural regions. Traditionally many community nurses based in these regions have combined several roles to meet the health care needs of a diversity of clients across geographically widespread areas. Thus the "triple duty nurse" (qualified in the specialisms of district nursing, health visiting and midwifery) regularly provided services in the past. However maintaining and demonstrating competence and skills across three areas of practice has become more problematic. Moreover local populations have typically declined in the last three decades, and staff recruitment and retention problems have become more severe. Accordingly the breadth inherent in the new FHN role seemed to offer some potential to address these problems.

Early in 2001 a 2 year "pilot" project began. Three regions in northern Scotland were involved initially, with a fourth joining the project in 2002. The project's challenging goal was to simultaneously develop and integrate a new FHN education programme and practice role. A Scottish University was commissioned to provide a degree -level course for registered nurses with a minimum of two years post-registration qualifying experience. In addition to being informed by the generalist principles of the WHO Europe FHN curriculum, this course was also required to fit into the UK's existing framework for community specialist practice qualifications (UKCC 1994). The latter document specifies that curricula are constructed around the four specialist domains of: clinical nursing practice; care and programme management; clinical practice leadership; and practice development.

The authors were commissioned to independently evaluate the operation and impact of the education programme and practice role. In relation to the education programme, two broad objectives were proscribed:

1) To evaluate the education programme curriculum and consider how well it fits into the Scottish context.

2) To evaluate the learning experience and preparation of FHNs and the support provided to them in placements, focusing in particular on the role of mentors.

This paper summarises the main findings and issues arising from the educational evaluation. Evaluation of the emergent role in practice is reported elsewhere (Macduff & West 2003).

EVALUATION METHODS

The design of the evaluation was principally informed by the most relevant parts from two key approaches to evaluation research. Pawson & Tilley (1997) suggest that evaluators use a range of objectified techniques with a diversity of informants in order to recognise regularities in the patterning of reactions to social programmes. Guba & Lincoln (1989) argue for a more involved cultural approach exploring how stakeholders construct meaning in relation to the programme being evaluated. Although these approaches have different theoretical foundations and there is dialectic inherent in combining some of their elements, this is not necessarily problematic. Individual or idiographic viewpoints are valued as they inform general or normothetic outcomes.

The evaluation included systematic collection of structured information pertaining to comparative educational processes (e.g. review of relevant curricula) and to the educational provider's own internal course evaluation processes (e.g. summative evaluations of modules). Enactment of the curriculum was investigated primarily through observation of teaching and assessment, and review of course work. Participant experiences were explored through semi-structured group interviews with students and with supervisors during the course, and semi-structured individual interviews with teachers at the end of the course. A key data collection tool was a questionnaire designed so that students and supervisors could summatively evaluate a number of aspects of the whole educational experience.

The questionnaire's content was informed by the work of Cameron-Jones et al (2000) and Watson & Harris (1999). Core content of the student and supervisor versions of this questionnaire was the same and included particular focus on the quality and nature of placement supervision. The questionnaire was pre-tested with a small group of students from a different community specialist practitioner course and some minor revisions were made. Analysis of data from subsequent administrations of the questionnaire to FHNs and their supervisors included aggregation of respondent's scores within the quality of placement supervision sub-scale. This allowed for some formal comparisons of the experiences of the two cohorts of FHN students using inferential statistics (MannWhitney U test). The internal consistency of this sub-scale was explored on successive administrations of the questionnaire using the alpha co-efficient statistic. This was found to range from 0.73 to 0.88. This suggests a satisfactory level of internal consistency (Streiner & Norman 1995).

Table 2 summarises the main sources of evidence and modes of analysis used in the educational evaluation. Through these means the evaluation sought to achieve breadth and depth of perspective. Ethical approval for the study was obtained from all relevant NHS Local Research Ethics Committees and was agreed with the Scottish University who provided the FHN programme.

FINDINGS

Overview of the Scottish pilot curriculum and its relation to other relevant curricula

Table 3 summarises key features of the curriculum developed for the pilot project in Scotland. Within the curriculum documentation the rationale for the content and the integration of theory, practice and assessment is addressed in a complex conceptual framework based on ideas from WHO Europe and Family Nursing ideas from North America (Friedman 1998; Wright & Leahey 1994). This makes it clear that the educationalists are aiming to shape the nursing role to enable work at three levels: in-depth with families, individuals and communities. Compared to module descriptors in the WHO Europe curriculum (Table 1), the modules in the Scottish course place less overt emphasis on decision making, managing resources, leadership and multidisciplinary working. Rather there is more influence from North American models of family assessment and intervention, such as the Calgary model (Wright & Leahey 1994).

The design of the Scottish course was tailored to fit in with some key aspects of the pilot project. One of these was the SEHD commitment to funding a cohort of students in each of the two years of the pilot so that a cadre of fully qualified FHNs would emerge with Bachelor of Nursing degrees and the new specialist practice award. The students attended full time and progressed through a fixed schedule of modules. Students' course fees, travel and accommodation were paid from a specially designated central budget which also paid the students' salaries whilst they were undertaking the course. As the students were existing employees, their employers in the participating regions could use the money saved on salaries as "backfill" monies, to resource temporary replacement staff to undertake the work previously carried out by the student.

These arrangements contrast with those typically seen on other community specialist practice award programmes in Scotland. Although students are generally recruited from the existing nursing workforces they usually undertake the educational programmes as part-time students. Some receive support from their employer (either in the form of payment of fees or in the form of paid study leave), but many are self-funding and utilise time off from work and annual leave entitlement for study purposes.

Differences are also evident in aspects of curriculum. In order to view the new course in context, we reviewed curricula from the five universities in Scotland who currently offer community-based degree programmes with a specialist practice award. Typically these curricula are more flexible, with students sharing a number of core modules with students on other nursing, health and social care programmes. Students may also have some choice about the order in which they undertake modules and the time taken to complete the programme. Most of these programmes are similar in content and structure due to the principles and specifications of the regulatory body (UKCC 1994 & 1995).

While the Scottish FHN curriculum identifies some content as core, this is integrated into three modules: working with families; communication; and research, decision-making and evaluation in clinical practice. Unlike other specialist practice qualification courses there are no modules dedicated to quality issues, teaching and supervision of others or the management of services, although aspects of these topics are referred to in the modules.

Thus, in overview, the new FHN curriculum developed for the Scottish pilot project has a number of key differences from other community specialist practice programmes, and also differs from the WHO Europe curriculum. As such, the FHN curriculum has been strongly

influenced by the needs of the pilot project and the nature of remote and rural nursing in Scotland. In short it is a customised degree programme.

Profile of the FHN students

Eleven students (Cohort 1) undertook the course during 2001 and twenty students in 2002 (Cohort 2). These thirty one nurses were typically middle-aged with very considerable experience of nursing in general, and of community nursing in their particular remote and rural location. Twenty were midwives. Twenty had no specific community specialist nurse qualification and were employed in E or F grade posts. Nine already had a district nurse qualification and three already had a health visiting qualification. Cohort 2 had a lesser proportion who were in part-time employment pre-course, and had a small sub-group who had only spent a few years working at their home base site and were typically rather younger.

A scheme for Accreditation of Prior Learning (APL) was developed in time for the second year in which the course ran. Eleven of the Cohort 2 students obtained some exemption under the scheme. This meant that they did not have to attend campus during their APL weeks, but most had to return to their jobs, and all still had to complete the modular assessments. This contrasts with APL arrangements in the other community specialist practice awarding degree programmes and proved unsatisfactory from the perspective of students, teachers and by any current understanding of APL processes.

Many of the Cohort 1 students, in particular, felt undervalued and under-developed prior to starting the course. During the first year of the course a number of major curricular modifications took place, and generally the first cohort of family health nurse students were more dissatisfied with their educational experiences than the second cohort. In retrospect, however, the majority viewed the learning experience very positively, as illustrated in this observation:

"Looking back on the last 10 months I can trace a development process from an isolated District Nurse to a confident Family Health Nurse mentality with the associated diversification and extension in health care outlook". (Cohort 1 student)

Placement support and supervision

This course, like other specialist programmes, required students to undertake clinical placements as part of the educational process. The educational course was based at a campus in the Highlands of Scotland and the students' clinical practice placements were within their own respective regions.

Providing support and supervision for a Family Health Nurse was a difficult undertaking as there were no role models or experienced supervisors who had worked in this role. For the students and supervisors of Cohort 1 in particular the FHN role was theoretical, and conceptions of its future enactment evolved during the course of the pilot project. The characteristics of the practice placement supervisors are summarised in Table 4. As can be seen there are many similarities between the first and second cohort of supervisors. The main differences pertain to the spread of professional working practice and the supervisory preparation undertaken.

Cohort 1 students' experiences of practice supervision were mixed, but were predominantly perceived as unsatisfactory**.** A range of problems was apparent, especially during the first eight months of the first year of the course. Students and supervisors concurred on the main aspects needing improvement. These were:

- better arrangements for selection of supervisors with supervisors being allowed to refuse to take supervision on if too busy or if their skills are not suitable
- preparation of supervisors so that they have information and a clear understanding of their role and that of the FHN before the course starts
- allocated time for supervisors to provide supervision.

Cohort 2 students' experiences were less mixed and more positive. Other questionnaire data confirmed that their perceived quality of clinical placement supervision was significantly better than that reported by Cohort 1 (Mann Whitney U= 39.5; p=0.004), with 90% thinking that the match between their supervisor's knowledge/skills and the knowledge/skills required for the FHN course were good/excellent. This compares to a figure of 46% for Cohort 1.

Nevertheless Cohort 2 supervisors felt that the process of preparing them to supervise was not good. These perceptions persisted despite the University providing a customised short course to prepare supervisors prior to the start of the course. In addition some of the participating NHS Trusts offered places on a generic supervision skills course. There was still a feeling for

many supervisors that they lacked allocated time for supervision and some had concerns about the lack of guidance given by the University.

"After a shaky start I now feel (at the end of the first semester) a bit clearer about the role of supervisors" (Cohort 2 supervisor).

Contact and communication problems arose for those supervisors who did not work in the same geographic area as the allocated student. These problems were less pronounced in the second year the course ran, and telephone and e-mail contact methods were used less frequently. Nevertheless, 58% of Cohort 2 students reported that their supervisor had never been present in person when they were working with families during the course (corresponding figure for Cohort 1 = 64%). Interestingly, supervisors were asked the same question. In 69% of the matched cases for Cohort 2 there was agreement between students and their supervisors that in-person supervision with families had never taken place (corresponding figure for Cohort 1 = 50%). Although these findings highlight that some students and supervisors have different perceptions of actual contact, there is sufficient agreement to conclude that in-person supervision of work with families did not happen for the majority of students on this course.

Practice–based experiences

Both cohorts of students were in close agreement, when it came to identifying the most valuable skills they had learned during their clinical placements. Overwhelmingly they identified communication skills (e.g. interviewing, listening) and family health assessment/promotion skills (e.g. use of genograms; understanding family dynamics; empowerment) as the most valued. Working with families was the focus of the practical work experiences. However, students were concerned about using families for assessment purposes and then moving on and the family's care reverting to established services. The fact that this new way of working was only being used for educational purposes in the first instance raises a number of important issues regarding: the introduction and management of a new role into an established service; the ethics of using students as change agents and the expectations of the public. Service development requires a process of change management to be planned, articulated and facilitated. The evolving nature of the nursing role and its fit with service delivery posed many challenges for all of those involved.

Campus-based experiences

There was similarly emphatic agreement between the cohorts when asked to identify the three aspects of campus based learning that they found most valuable. Overwhelmingly they identified coming together on campus to learn together, share ideas and experiences as major benefits. In addition family systems theory, communication and IT skills were emphasised, along with research.

Teachers perspectives

Teachers saw the balance between campus attendance and distance learning as being a strength of a course that was very much tailored to a specific market context. There was recognition that to be viable in other contexts the course would require modification. This might involve a greater proportion of distance learning through the innovative web based intranet facility used during the course. On return to practice some of the new FHNs remained active in using the web based facility to maintain learning and support, but five of the eleven lacked access to reliable internet facilities at work.

Review of the curriculum and its enactment

Observation of teaching and assessment procedures generally found congruence between method, content and assessment. As a whole the course was rather over-assessed, but the range of assessment methods was imaginative (see Table 3). The module on Advanced Family Health Nursing Practice was found to be the most problematic. Module content juxtaposed in-depth material on family nursing with a number of skills- based workshops on diverse practice topics ranging from child protection to four layer bandaging. While these topics reflected the breadth of what family health nursing might involve in remote and rural practice, it raised questions as to what would not be eligible to be considered as advanced practice. In effect this lack of definition reflected tension between the multiple demands of a generalist primary care system predicated on response to individual problems and the more specialist aspiration for in-depth work with the whole family as the client. Moreover the Objective Structured Clinical Examination (OSCE) designed to assess this module was not found to be well suited to purpose and would require considerable development to make it so.

Thus there is scope for intra-module redesign and we suggest that this could be concurrent with a more general restructuring of modular delivery. This would involve having two

modules in the first semester that could be shared with other community based programmes and facilitate credit exemption (Macduff & West 2003).

Most of the modifications already made to the course in the two years of its existence have resulted in improvement. A summary of the course strengths and weaknesses is presented in Table 5. The balance between campus attendance and distance learning emerged as being a real strength. Other strengths included the learning of communication skills in the context of family health assessment. Indeed the new family health assessment /promotion skills (e.g. use of genograms; understanding family dynamics; empowerment) were valued very highly and these were seen as central to creating a distinctive new professional identity. The latter aspect was also tied to the concurrent development of policy and practice. This linkage was innovative, demanding and to some extent challenged the existing Nursing and Midwifery Council (NMC, formerly UKCC) specialist practice framework.

DISCUSSION

In many ways the difficulties that arose in this pioneer FHN course should not be surprising given the nature of the challenge which the educators faced. In essence they had to accommodate the need for a range of relevant generic content while developing a distinctive new specialist focus that also satisfied the requirements of the NMC framework. This was a tall order, especially since the role of the FHN was essentially hypothetical during the first year of the course.

In comparison to other Scottish community nurse specialist practitioner courses on offer the FHN course emerges as much more focused on its speciality, being theoretically grounded in an ideology of nursing which combines elements of Family Nursing from North America with the promotional ideas from WHO Europe. The construction of the specialist award has been simplified and all effort has been concentrated on the speciality of family health nursing at the level of practice, education and assessment.

Course content also differed significantly from WHO Europe's own suggested Family Health Nurse curriculum. The WHO Europe curriculum has more emphasis on management and leadership. Indeed advocates of the FHN role (e.g. Kesby 2002) see the FHN as a nurse leader on equal partnership status with the GP. However the latter interpretation was not what this curriculum was aiming for. Rather these very experienced community nurses were educationally prepared in such a way that they would be enabled to personally deliver this

particular family health nursing approach within their communities. In effect the Scottish FHN curriculum has emerged as focused on the first three of the WHO Europe core functions (i.e. care provider; decision maker; communicator) rather than the others (community leader; manager). The actual development of the role during the first year of FHN practice is described elsewhere (Macduff & West 2003), but the findings confirm these functional priorities.

CONCLUSION

The Scottish FHN programme developed as part of the pilot of the WHO Europe Family Health Nurse concept is substantially different from other specialist community nursing programmes. It emerges as a distinctive Scottish educational hybrid which has produced a skilled and knowledgeable community nurse who has been specially prepared to work in remote and rural health care. It has growth potential unto itself, but it also provides a precedent for other educational providers in the UK to reconsider their approach to specialist practice degree level education. With the current restructuring of the UK register into three parts (NMC 2003), one of which is specialist community public health nursing, there is opportunity and impetus for such review.

Acknowledgements

The authors are grateful to all those who contributed to making the study possible. The study was funded by the Scottish Executive Health Department (SEHD). However the views expressed in this article are those of the researchers and do not necessarily represent those of the SEHD.

REFERENCES

Cameron-Jones M; O'Hara P & Linton A (2000) Evaluation of the role of nurse and midwife teachers in support, and in the quality assurance of the work of, practice placement supervisors. Report for the National Board for Nursing, Midwifery and Health Visiting for Scotland : The University of Edinburgh

Friedman M (1998) Family Nursing Research, Theory and Practice. Appleton Lange: Conneticut

Guba Y & Lincoln E (1989) Fourth generation evaluation. Sage: London

Kesby S (2002) Nursing care and collaborative practice. Journal of Clinical Nursing 11 (3): 357-366

NMC (2003) The new register: consultation background information. NMC: London

Macduff C & West B (2003) Evaluating family health nursing through education and practice. Scottish Executive Social Research. The Stationery Office: Edinburgh:

Pawson R & Tilley N (1997) Realistic Evaluation. Sage: London

Streiner D & Norman G (1995) Health measurement scales: a practical guide to their development and use. Oxford Medical Publications: Oxford

UKCC (1994) The future of professional practice – the Council's standards for education and practice following registration: programmes of education leading to the qualification of specialist practitioner. UKCC: London

UKCC (1995) Fact sheet: Implementation of the UKCC's standards for post registration education and practice (PREP). UKCC: London

Watson H & Harris B (1999) Supporting students in practice placements in Scotland. Report for the National Board for Nursing, Midwifery and Health Visiting for Scotland: Glasgow Caledonian University

World Health Organisation (2000) EUR/OO/5019309/1300074 The Family Health Nurse: context, conceptual framework and curriculum. WHO Regional Office for Europe: Copenhagen

Wright L & Leahey M (1994) Nurses and families: a guide to assessment and intervention. Davis & co: Philadelphia

Table 1 WHO Europe Family Health Nursing Curriculum

Curricula Academic level	Specialist module content	Duration	Assessment techniques
		Total of 40 weeks	
Post-graduate level	Concepts, practice and theory	2 weeks	Essay, exam, course work practical assessment
Academic award plus specialist practice award	Provision of care working with families	10 weeks	
	Decision making	4 weeks	
No core modules	Information management &research	6 weeks	
	Provision of care working with communities	10weeks	
	Managing resources	4 weeks	
	Leadership and multi-disciplinary working	4 weeks	

Table 2 Main sources of information and modes of analysis used in evaluation

Source of information	Mode of analysis	Level of interpretation and application
1. Relevant educational curricula	Situational and thematic analyses	WHO Europe, Scotland and local
2. Internal course evaluation documents	Thematic analysis	Local context: university course
3. Student profiles	Description and descriptive statistics	Practitioner
4. Student summative evaluation questionnaire	Comparative statistical analyses using SPSS; synthesis of qualitative comments	Local context: university course
5. Supervisor summative evaluation questionnaire	Comparative statistical analyses using SPSS; synthesis of qualitative comments	Local context: university course and service provision
6. Student assignments	Thematic analyses of educational level and application of theory to practice	Local context: university course
7. Observation of teaching	Identification of strengths and weaknesses of various approaches to education	Local context: university course
8. Observation of assessment procedures	Thematic analysis of observation notes	Local context: university course and service provision
9. External examiner reports	Thematic analysis of educational level and application of theory to practice.	Local context: university course
10. Teaching staff interviews	Thematic and content analysis of strengths and weaknesses	Local context: university course and Scotland wide
11. Group discussions with students	Thematic analyses of notes taken	Practitioner and local context
12. Field notes pertaining to interviews with students and supervisors in context	Thematic analyses	Face to face and local context (university course and service)

Table 3 Scottish University Family Health Nursing Curriculum

Curricula Academic level	**Specialist module content**	**Duration**	**Assessment techniques**
SCOTCAT Level 3		**Full time 40 weeks total**	
APL and APEL limited applicability.	Working with families in the community	15 weeks *(concurrent with)*	Case study, exam, video presentation and analysis, community portrait, OSCE , case reports
BN and Specialist practice award	Communication Advanced Family Health Nurse practice	15 weeks 13 weeks	
No core modules	Research, decision making and evaluation in clinical practice	12 weeks	

Table 4 Profile of supervisors

	Cohort 1 (10 supervisors; 1 supervised 2 students)	**Cohort 2** (18 supervisors; 2 supervised 2 students)
Number working as District Nurse (often also with active midwifery role)	5 (50%)	10 (56%)
Number working as Health Visitor(often including school nursing)	5 (50%)	4 (22%)
Number working as triple duty nurse (DN +HV+MW)	0	2 (11%)
Number working as lead nurse (triple duty background)	0	1 (6%)
Number working as community psychiatric nurse	0	1 (6%)
Number who were graduates	3 (30%)	4 (22%)
Number who had experience supervising diploma nursing students in past 5 years	9 (90%)	15 (83%)
Number who had experience supervising post-registration community specialist practitioner students in past 5 years	3 (30%)	6 (33%)
Number who undertook specific pre-course preparation to supervise FHN students	0	6 (33%)

Table 5 Strengths and weaknesses of the Scottish FHN curriculum

Strengths	Weaknesses
Type of students attracted to the course.	Breadth of content
Theoretical framework	APL/APEL procedure
Family assessment process	Too much assessment
Balance in modes of delivery	Sequence and content of modules
Tailoring of course to specific market	Preparation of supervisors