

SPOTLIGHT ON RURAL NURSES: IMPLICATIONS FOR A NEW NURSING DISCIPLINE IN JORDAN

Karen Francis, PhD, RN¹

Hani Nawafleh²

Ysanne Chapman, PhD³

¹ Professor, [School of Nursing and Midwifery](mailto:karen.francis@med.monash.edu.au), Monash University, karen.francis@med.monash.edu.au

² PhD Candidate, [School of Nursing and Midwifery](mailto:hani.nawafleh@med.monash.edu.au), Monash University, hani.nawafleh@med.monash.edu.au

³ Senior Research Fellow, [School of Nursing and Midwifery](mailto:ysanne.chapman@med.monash.edu.au), Monash University, ysanne.chapman@med.monash.edu.au

Keywords: Rural Area, Primary Health Care, Nurses, Jordan

ABSTRACT

This ethnographic study sought to provide a snapshot of rural nurses' practice in comprehensive primary health care centres (CPHCCs) in Jordan. These nurses provide a vital service to local populations although it is recognised that the nursing workforce is predominantly secondary level (e.g. practical nurses and aide nurses). The findings indicate that educational preparation, skill-mix, access to professional development, the lack of collegiate support, nursing practice standards, ineffective management, poor distribution of health resources and geographic isolation are important factors impacting on the CPHCC nurses' practice. The study highlights the need for improved resourcing of the CPHCCs and advocates immediate action by the Ministry of Health (MoH) and senior nursing administration to support the development of rural nursing. In addition, it is recommended that effective recruitment and retention strategies to address the nursing shortage and improve the nursing skill-mix be developed.

INTRODUCTION

The term rural nursing and rural practice are not commonly used in Jordan although there is an acceptance that much of the nation is rural. This paper describes the practice of nurses employed in CPHCCs in rural areas. Rural services are defined in this study as services provided outside major urban centres.

The Jordanian Ministry of Health (MoH) accepts that the level of health service provision offered to less densely populated regions is different to that available in larger regions. They embraced the World Health Organizations (WHO) approach to health service provision espoused in the Alma Ata and subsequent documentation and developed a system of health care centres that are located throughout the nation that provide primarily non-acute medical care (WHO 1986; Kharabsheh 2000). The MoH recognised the need to improve the health status of Jordanians and argued that greater access to health care was an important first step. The health centres were commissioned to provide primary health care which the WHO in 1988 identified as a strategy for achieving 'health for all' (Twinn 2001).

Health professionals recruited to the CPHCCs to provide health services include registered, practical and aide nurses [1]. The nurses' roles traditionally are curative in nature and involve direct patient care (Nahas, Nour & Al-Nobani 1999; Haddad 2002). Most nurses have been trained/educated for practice within an acute care environment and have had little, if any, orientation to practice that is primary level and largely community based.

Jordan, like many global nations is experiencing a shortage of experienced registered nurses. It is proffered that many Jordanian nurses choose to work abroad as financial reward is greater than that available in Jordan (Haddad 2002; Mrayan 2004). In addition, there are no incentives to encourage nurses to work in Jordan, especially areas that traditionally have found recruitment and retention of nurses difficult, namely the southern and isolated (rural) areas. The turnover of staff in these areas is high, reported the MoH. He stated that up to 50% of new health professionals do not accept employment outside the major cities (Alrai 2003). Nursing critics of the MoH maintain that the MoH could address the nursing shortage if they adopted a practice of paying incentives to staff accepting positions in non-desirable areas (Alrai 2003).

METHODOLOGY

This study sought to understand the nature of practice of primary care nurses employed in CPHCCs in rural Jordan. An interpretive ethnographic methodology was chosen as this approach allows for in-depth understanding of phenomena that is shared by a cultural group (Morse & Field 1996; Denzin & Lincoln 2000). Ethnography describes the daily life experiences of a cultural group within a specified context and interprets the meaning of generated data (Roper & Shapira 2000). Denzin and Lincoln (2000) advocate that data collection methods include watching, listening and asking questions while Spradley (1979) considers that ethnographers should focus on the way people act and use artefacts. Observing and listening to Jordanian primary care nurses as they provide care to rural communities realises understanding of this cultural group as they engage in caring for people. Using such methodology in preference to other qualitative genres allows the researcher to appraise the clinical work of the nurses and challenge work practices and the systems in which they operate.

SELECTION OF DATA COLLECTION SITES

Following ethics approval from the host University and the Jordanian MoH three targeted rural CPHCCs, representative of three broad geographic regions, namely the north, the central, and the southern regions were invited to participate in the study. The emergency departments were selected as the most appropriate context for this study as the nurses provided direct patient care to a range of clients including ambulatory care patients. The researcher was cognizant that his gender excluded him accessing other departments such as maternal and child care services.

DATA COLLECTION

The researcher spent from 2-4 weeks in each of the three sites. Staff were informed of the study and invited to participate. Written consent was obtained from staff in the emergency department/s prior to data collection commencing. The researcher engaged initially in general observation of the setting until familiar with the rhythms and patterns of the department prior to commencing fieldwork and field notes were documented every day (Morse & Field 1995). The familiarisation time differed from site to site and ranged from 3-10 days depending on the department activity level, numbers of staff to observe and acceptance of the researcher's day to day presence.

Once the researcher felt accustomed to the setting an intensive period of participant observations were completed. Frankfort-Nachmias & Nachmias (1996, p.282) argue that

researchers engaged in participant observation must acknowledge their biases prior to entering the field. A justification was offered and recorded and subsequently discussed with other colleagues not associated with the culture and/or the data collection before accepted as legitimate data.

The researcher engaged with participants as they practiced seeking confirmation of the rationale for observed activity. The participants included registered nurses, practical nurses and aide nurses. Williamson (2002, p. 242) believes that exploratory interviews in the early stages of most research projects allow researchers to explore tentative illuminations. The researcher observed and recorded in a field diary the ordinariness of daily life within the department/s and developed exemplars of usual practice and those that were unusual to guide further observations and the development of vivid descriptive ethnographies. Non-verbal communications were observed and recorded in the field notes allowing for elucidation of the culture of nursing practice within these settings (Gordon & Fleisher 2002). To confirm and further explore conceptual understandings internal key informants (nurse participants within the CPHCCs) were selected for their perceived capacity to provide further enlightenment of the culture (Leininger 1985). External key informants were invited to participate in an in-depth interview (Lincoln & Guba 1985; Williamson 2002). They were recruited from the Nursing Council, the MOH, Jordanian Universities and elsewhere based on their perception that they either directly or indirectly influenced the practice of the PHC nurses as ethnographers seeking to gain insider understanding (emic) and holistic meaning about the interactions and behaviours of certain groups of people (Fiveash 1998; Leininger 2001). There was no intent to generate consensus of key informants on culture and nursing practice rather, differences as well as similarities were embraced.

The approach used for conducting interviews may range from informal dialogue to a formal structured interview process (Baillie 1995; Morse & Field 1995). In this study a focussed or semi-structured interview process was used as it provides the opportunity for the researcher/s to develop a list of questions and is flexible "... allowing the interviewer to follow up on leads provided by participants for each of the questions involved" (Williamson 2002, p. 243). Demographic data including age, gender, qualifications and employment history were obtained from each key informant. Interviews lasted from 45 minutes to one hour and were audio-taped for subsequent transcription (Morse & Field 1996).

As the practice of nurses is influenced and directed by policy, research and tradition, it was considered important that relevant localised and national documentation be identified and reviewed. According to Lincoln & Guba (1985), existing records may provide insight into what is occurring in a setting, and/or within a group of people. Fetterman (1989) argues that personal documents can assist in understanding how people view their world while public records provide evidence of events that have occurred.

Spradley (1979, p. 8) suggests that ethnographers' data collection and analysis is guided by continually asking the data "in what ways do members of the community (under investigation) ... actively construct their world, what is it like for a person in this situation, how do people actively shape their lives within this context and what environmental factors influence coping and adaptation."

RESULTS

Enthnographic Descriptions

The CPHCCs provide a range of services to local populations. They were staffed by general medical practitioners, nurses, midwives, dentists, administrative support personnel and a limited number of diagnostic technicians. However, for the purposes of this study observations of staff were confined to the nurses in the EDs.

The CPHCCs were either two storey buildings or single level construction. The emergency department, ambulatory clinics and X-ray units were located on the ground floor of the two level buildings and maternity services, general administration and medical officer accommodation were located on the second level. The EDs in the single level CPHCCs were located at the front of the building allowing easy access with other departments adjoining. The emergency departments within the CPHCCs were in poor repair and the equipment was of poor quality and often obsolete and/or not functioning.

Services Provided

The three rural CPHCCs provided a similar range of services including primary medical care, midwifery, dentistry, pathology and X-ray services. Patients presented to the emergency units of the CPHCCs for medical treatments that were non-life threatening. The nurses in the EDs assisted the medical doctors who directed their practice.

Nursing Practice

The work of the nurses was task orientated and directed by the physicians. Data revealed that nursing staff were predominantly practical and aide nurses who were recruited locally. Interestingly, the nurses engaged in activities that are considered advanced practice such as suturing and venipuncture yet were largely unaware and non-compliant of universal precaution recommendations. The nurses did not engage with the community to promote health issues. Dialogue with patients was limited to directions related to the therapy being initiated.

Nurses had little understanding of contemporary health issues and demonstrated a lack of awareness of 'safe practice'. Nursing practice was ritualized with staff engaging in activities that exposed themselves and others to potential risk of infection. For example nurses recapped used needles before disposal. The needles were deposited in unmarked receptacles that were then collected by hospitality staff and subsequently dumped at the local garbage repository.

There was no evidence of nursing leadership in the EDs and/or the CPHCCs. It is offered that the some CPHCCs did not have registered nurses on staff who would be expected to drive nursing development. Nurses responded to the directions of the attending medical doctors and did not initiate interventions unless ordered. They were not consulted by the doctors or the CPHCC management on any matters related to the functioning of the centres and/or case management issues.

The CPHCCs offered that they found it difficult to recruit and retain registered nurses. Haddad (2002) and Mrayan (2004) maintained that many nurses do not value, and therefore do not consider nursing practice in these settings, as a career option. Key informants suggested that registered nurses are rare in the CPHCCs. A nursing supervisor from the southern area indicated

that they have a major problem; the shortage of nurses at all levels. He offered the following reasons for these shortages:

The nursing profession is not a preferred profession for the local people and few of them study nursing. The majority of our nurses are practical and aide nurses while most of the registered nurses are from other cities...they get their first employment then after getting some experience, they transfer to Amman or other cities... the MoH did not give good incentives for the nurse to stay more in this area... [Ahmad, NVivo, Section 3.3, Paragraphs 59-66].

The CPHCCs and Geographic Location

The physical environment of the centres and the location of the CPHCCs influenced the CPHCCs ability to recruit staff. Nader a nursing supervisor from indicated that the CPHCCs located in the southern region are not well resourced compared with those in more populous centres. It was noted that with increasing rurality (decreasing population base) the number of registered nurses employed in the CPHCCs decreased. Nader commented that he had:

... met the General Director of Aqaba Health Directors who informed me that seven to ten health centres do not have any qualified nurses and all the nurses there are aide nurses. He claimed that the reason is that many skilled people do not like to work in this area ... [Nader, NVivo, Section 1.1.6, Paragraph 19].

It was apparent that the CPHCCs were poorly resourced. There were insufficient numbers of appropriately prepared staff (medical and nursing) to meet service needs and the physical resources were not conducive to safe, effective and cost efficient service delivery. A head nurse from the southern area stated:

... the equipment is not enough for a comprehensive health centre providing a 24 hours emergency service ...and the validity of our equipment is not good [NVivo, Section 4.1.1, Paragraphs 20-22].

It was revealed that the currency and the level of maintenance of the equipment decreased with remoteness. A study conducted in Jordan indicated that clinics located in the rural areas are not provided with regular maintenance services for equipment and buildings. Hijazi & Al-Ma'aitah (1999) asserts this factor compromised the quality of health services provided and influences health professional's decisions not to accept positions in rural services.

When questioned on the techniques they adopted for sterilising, many nurses stated that the shortage of equipment was a major reason for the adoption of poor sterilization techniques:

...the sterilization process in the centre is very poor. I am not sure if it is up to 30% - 40%. Many times, I cleaned the instruments and placed them in the dry heat oven but after few minutes, we use them again for a new case [Abdallah, NVivo, Section 4.1.1, Paragraphs 20-22].

It was noted however, that compliance with recommendations to avoid cross infection or accidents with needles was not routinely observed. Nurses engaged in risky practices that included recapping used needles, disposing of needles and sharps in general disposal units, poor cleaning and sterilising technique and non-compliance with recommended hand washing protocols. Many of the practices adopted by the nurses were potentially lethal to themselves and the community.

There was no evidence of nurses having access to training and education and no local in-service education programs were provided. External key informants highlighted that there were opportunities for nurses to access training programs citing opportunities provided through the Primary Health Care Initiative Project that is jointly funded program offered by UNAID and the MoH. The nurses in this study when asked to comment on the program and availability of training programs reported that were unaware of these programs.

DISCUSSION

The resource limitations identified in the CPHCCs were offered as the reason for adoption by nurses of poor cleaning and sterilization practices. It is acknowledged by the researchers that it is difficult to work effectively in rural areas where resources are inadequate. Indeed, Jones and Cheek (2003) contend that nurses in rural Australia have expressed frustration at the quality of equipment and resources provided. They note the nurses believed their practice and the health of the community was compromised as a result of poor resourcing. Poor quality equipment and inadequate supplies including dressing packs, bandages, medications, cleaning solutions and contaminated waste disposal units place staff and the broader community at unnecessary and preventable risk.

This study highlights that the practice of nurses in the CPHCCs is self-limiting. There was an expectation by the MoH that the nurses employed in the CPHCCs provided nursing care that met community needs and was at a standard acceptable to the Jordanian nursing profession. The reality however, was the nurses' practice was directed by physicians. The nurses were not proactive and had little understanding of the role of professional nurses and were not cognisant of contemporary practice standards or the development of an autonomous standing.

The data revealed that there is a need for more effective policy to guide and standardise nursing practice. The practice of the CPHCC nurses included skills that the profession has identified as advanced practice. To ensure that nurses' work is consistent with policy directives and the profession of nursing expectations, appropriate training and education must be made available (Mrayan, 2004). In addition, CPHCC nursing staff require assistance to develop skills that will allow them to engage with patients and the broader community to promote wellbeing. It is also necessary for the nursing skill-mix of the CPHCCs to be addressed. This can be achieved through a well considered recruitment initiative that targets registered nurse. This initiative must include an incentive package if it is to be successful.

This study has identified that rural nursing practice in Jordan is reflective of the global concerns raised by nurses in similar practice contexts (Bushy & Leipert, 2005; Kenny & Duckett 2003; Francis et al. 2001; MacLeod et al. 1998). A new nursing discipline, 'rural nursing' has emerged for Jordan to consider. To ensure that the inequities and the challenges faced by rural nurses are exposed and addressed it is recommended that further research be undertaken to explore nursing practice in rurally based hospitals and in the more remote health centres not covered in this study. Moreover, the study has drawn attention to the need for nursing curricula

at all levels to include content on 'rurality'. The nurses in this study are victims of a system that has attempted to move forward in response to population health needs and global rhetoric without understanding the impediments to the new initiatives.

CONCLUSION

This paper reports on an ethnographic study which sought to describe the practice of primary care nurses employed in CPHCCs in rural Jordan. The findings indicate that poor resources, inadequate educational preparation, limited skill-mix and access to professional development, lack of nursing leadership and role models, collegiate support, and geographic isolation are factors impacting on nursing practice in the rural CPHCCs. It is recommended that resources be directed toward improving the capacity of the CPHCCs and access to education, training and professional development improved to ensure that incumbent staff are prepared for their roles and that their practice is contemporary.

This study has highlighted the potential for an emergent new nursing discipline 'rural nursing' in Jordan. The Jordanian nursing profession needs to embrace the findings of this study by initiating steps to realise the professionalism of nursing in all contexts, regulate to sustain best practice and limit risks thus providing a safe and secure nursing workforce that is effective and responsive to the changing needs of Jordanian society. While nursing in western societies is well down the track towards realising professional autonomy, the evolution of nursing in Jordan is embryonic. As the profession matures and raises its own strong leaders in nursing, the propensity for nurses to be seen as just hand maidens to physicians will yield towards a more acceptable partnership reflective of similar developments in the western world.

This study has identified rural nursing as an explicit practice within nursing. It is anticipated that as the discipline of 'rural nursing' gains momentum the needs of this group and those of the communities in which the nurses work and live will be raised. Nations such as Australia, New Zealand, the USA and Canada have well organised nursing associations that represent 'rural nursing' (Francis & Lindsey, 2002). It is strongly recommended that Jordan investigate the potential for a similar association.

NOTES

[1] 'Practice Nurse' is an 18- month community college and hospital trained course. 'Aide Nurse' is a nil-6 month hospital-trained course.

REFERENCES

- Baillie, L. (1995). Ethnography and nursing research: a critical appraisal. *Nurse Researcher*, 3(2), 5-21.
- Bushy, A. & Leipter, B. D. (2005). Factors that influence students in choosing rural nursing practice, *Rural and Remote Health* 5, 387. Retrieved from <http://rrh.deakin.edu.au/articles/subviewnew.asp?ArticleID=387>.
- Denzin, N. K. & Lincoln, Y. S. (2000). *Handbook of Qualitative Research* (2nd ed.). Thousand Oaks: Sage Publications.

- Fetterman, D. M. (1989). *Ethnography: Step by Step*. Applied Social Research Methods Series. Newbury Park: Sage Publication.
- Fiveash, B. (1998). The experience of nursing home life. *International Journal of Nursing Practice*, 4, 166-174. [MEDLINE]
- Francis, K. & Lindsey, D. (2002). Revisiting the past: the Association for Australian Rural Nurses comes of age. *Australian Journal of Rural Health*, 10, 308-309. [MEDLINE]
- Francis, K. Bowman, S. & Redgrave, M. (2001). Rural Nurses: Knowledge and Skills required to Meet the Challenges of a Changing Work Environment in the 21st Century-A review of the Literature, Commissioned Research Project, National Review of Nursing Education. Retrieved from http://www.dest.gov.au/highered/nursing/pubs/rural_nurses/1
- Frankfort-Nachmias, C. & Nachmias, D. (1996). *Research Methods in the Social Sciences* (5th ed.). New York: St. Martins Press.
- Gordon, N. & Fleisher, W. (2002). *Effective Interviewing & Interrogation Techniques*. San Diego: Academic Press.
- Haddad, L. (2002). *First annual report, nursing and midwifery in Jordan: its reality, needs & strategies ambition with no limits*. Jordan University of Science & Technology: Jordan Nurses & Midwives Council, Jordan.
- Hijazi, S. & Al-Ma'aitah, R. (1999). Public service reforms and their impact on health sector personnel in Jordan. In *World Health Organisation, & International Labour Office Impact of Public Service Reforms on Health Sector Personnel* (pp. 98-150). WHO and International Labour Office.
- Jones, J. & Cheek, J. (2003). The scope of nursing in Australia: a snapshot of the challenges and skills needed. *Journal of Nursing Management*, 11, 121-129. [MEDLINE]
- Kenny, A. & Duckett, S. (2003), Educating for rural nursing practice. *Journal of Advanced Nursing*, 44(6), 613-622. [MEDLINE]
- Kharabsheh, S. (2000). The Ministry of Health Expectations for Improvements in Primary Health Care. *PHCI INNOVATIONS in Primary Health Care*, 1(1), 4.
- Leininger, M. (1985). *Qualitative Research Methods in Nursing*. Orlando Florida: Crune & Stratton Inc, Harcourt Brace Jovanovich Publishers.
- Leininger, M. (2001). *Culture Care Diversity and Universality: A Theory of Nursing*. Boston: Jones and Bartlett Publishers.
- Lincoln, Y. S. & Guba, E. G. (1985). *Naturalistic Inquiry*. Beverly Hills: Sage.
- MacLeod, M. Browne, A. & Leipert, B. (1998), Issues for nurses in rural and remote Canada. *Australian Journal of Rural Health*, 6, 72-78. [MEDLINE]
- Morse, J. M., & Field, P. A. (1996). *Nursing Research: The application of qualitative approaches*. London: Chapman & Hall.
- Morse, J. M., & Field, P. A. (1995). *Qualitative Research Methods for Health Professionals*. London: Sage Publications.
- Mrayyan, M. (2004). Perceptions of Jordanian Head Nurses of Variables That Influence the Quality of Nursing Care. *Journal of Nursing Care Quality*, 19(3), 276-279. [MEDLINE]
- Nahas, V. L., Nour, V., & Al-Nobani, M. (1999). Jordanian undergraduate nursing students' perceptions of effective clinical teachers. *Nurse Education Today*, 19(8), 639-48. [MEDLINE]
- 150 physician and nurse refused to work in the MOH*. (2003 June). Al Rai Newspaper.
- Roberts, K., & Taylor, B. (2002). *Nursing Research Processes An Australian Perspective*. Australia: Nelson Thomson Learning.

- Roper, J., & Shapira, J. (2000). *Ethnography in Nursing Research*. London: Sage Publications.
- Spradley, J. P. (1979). *The Ethnographic Interview*. New York: Rinehart & Winston.
- Twinn, S. (2001). Developments in nursing practice in primary health care in Hong Kong: opportunities and challenges. *Journal of Clinical Nursing*, 10(3), 345-351. [[MEDLINE](#)]
- Williamson, K. (2002). *Research methods for students, academics and professionals: Information management and systems* (2nd ed). Wagga Wagga, New South Wales: Centre for Information Studies, CSU.
- World Health Organisation (WHO) 1986. *Health and Welfare Canada, & Canadian Public Health Association. International Conference on Health Promotion: The move towards a new public health*. Ottawa Charter for Health Promotion, Ottawa, WHO.