

Pilot study: how Sydney community nurses identified food security, and student nurse focus group perceptions

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Food security, food insecurity, community health, community health nurse (CHN)

ABSTRACT

Objectives

This paper aims to discuss and explore food security in the context of community health nursing, to provide insight about how frontline workers may identify whether their client is food secure.

Design

A qualitative descriptive design pilot study, using questionnaire and unstructured interviews.

Setting

Community health services across Sydney.

Subject

How community health nurses identify whether their client is food secure.

Method

Three community health nurses were interviewed and their responses recorded. Two student nurses participated in a focus group during professional work experience in community health.

Findings/Results

Although community health nurses claim they can identify whether their clients are food (in)secure, it remains unclear how they operationalise this claim, and indeed if they do, what the outcome may be for their clients' health determinants.

Primary argument

To raise awareness and stimulate discussion about food security as a social determinant of health, and whether community nurses have a role identifying client food security.

Conclusion

Food (in)security is increasingly recognised as a social determinant of health, with evidence that the prevalence of food insecurity is increasing in Australia. It is acknowledged that community health nurses have established professional relationships with their clients, and that food insecurity may be identified through formal and informal means.

A more open discussion is required about food (in)security and potential ways in which it may be discussed in non-judgemental, sensitive ways. Further investigation is required to interview community health nurses, in the context of their relationships with clients, how they establish whether food security is occurring and being maintained.

INTRODUCTION

Food insecurity, an important Social Determinant of Health associated with poor health outcomes (Wilkinson and Marmot 2006) has been identified as a significant Australian public health issue at national and state levels (Nolan et al 2006; NSW Centre for Public Health Nutrition 2003). It has been shown that food insecurity affects physical, mental and emotional health and well-being of families and individuals (Foodbank 2016). While food insecurity may be perceived to be more prevalent in developing countries, it has been identified as a growing problem in Australia.

Community health nurses, at the forefront of providing health care during each stage of the life cycle, are pivotal in assessing client need and making appropriate referrals across many dimensions. They are in a key position to identify food insecurity with clients, including families with children, following childbirth, the elderly, those with chronic and complex health care needs, and from other vulnerable groups.

This qualitative, descriptive pilot study aimed to discuss and explore current methods used by community health nurses to identify food (in)security in their clients, and the role of nurses. It also aimed to gain insight into how nursing students during work experience on community placements perceive and understand food insecurity.

Student nurses, as beginning nurses are expected to develop skills in critical thinking and evidence-based practice to prepare them for professional practice. They learn within complex policy and education frameworks as well as professional experience programs in order to integrate theory with practice. During community practice experience, nursing students develop knowledge and skills while working under the supervision of an experienced CHN, accompanying them on home visits and working in community clinics.

LITERATURE REVIEW, FINDINGS AND GAPS

A literature search was conducted via UTAS Library using nursing and midwifery databases to search nursing and allied health articles. Key words 'food security'; 'food insecurity'; 'community health' and 'Australia' were used, searching peer reviewed articles in English, in abstract from 2008-2014. Only relevant full texts were selected: eleven articles via CINAHL, and three of twenty articles via Medline PubMed. Articles in English, from Australia, United States of America and United Kingdom were selected, because of similarities between demographics of clients, education of health workers, and studies in food (in)security. The literature searches revealed a body of current literature pertaining to food security in Australia, mainly among lower income groups (Rosier 2011; Innes-Hughes et al 2010; Nolan et al 2006).

The Physical Activity and Nutrition Obesity Research Group (PANORG) (Innes-Hughes et al 2010) discussed the USDA food security tool (Bickel et al 2000) its use in the National Nutrition Survey and NSW Population Health Survey and noted the "absence of measurement of food insecurity for reasons other than financial constraints, such as limited mobility, illness, mental illness or social isolation". PANORG (Innes-Hughes et al 2010) reported that community level reporting of food insecurity is neither widely discussed nor commonplace in Australia, and suggested further research to collect information about people experiencing food insecurity be conducted to add to the overall knowledge about food security in NSW.

CHNs undertake comprehensive psycho social, physical and functional assessments of clients, using documents based on NSW Health guidelines (Sydney District Nursing Assessment Tool, Community Health Nursing Assessment 2014; NSW Department of Health Supporting Families Early Package 2009) to gather comprehensive information about clients' lifestyle, health history and personal care needs, upon which care planning and referrals are based. A preliminary review of existing psycho-social and physical assessment

tools and documentation currently in use reveals there are no specific inquiries related to food security with regards to whether the client and/or family can afford adequate food to sustain a healthy life, or whether they have enough food. It is unclear from the literature reviewed how CHNs working in community health settings in Sydney determine specifically if their clients are food secure.

Searches for professional CHN organisations undertaken through NSW Nurses and Midwives Association, revealed fewer professional organisations compared with other nurse speciality organisations, which is interesting in a climate of increasing emphasis of community based care (HealthOne, NSW Health 2006; Brookes et al 2004).

Consequently Koch (cited in Brookes 2004) claims that CHNs “have escaped scholarly scrutiny, and their voice has been weak in nursing matters”. A fair proportion of research utilised in community health practice is ‘applied’ research in the context of clinical care and outcomes, and research relevant to CHNs tends to focus on health and well-being in ageing populations (Arbon and Cusack 2011) thereby excluding other vulnerable groups. Brookes (2004) found “there were conflicting role expectations” between health care sectors, and identified “underutilisation and untapped potential of the role of community health nurses”.

BACKGROUND

Food security is achieved when all people at all times have physical and economic access to sufficient, safe and nutritious food to meet dietary needs and food preferences for an active and healthy life (Food and Agriculture Organisation 1996). Yet food insecurity may be hidden in our communities (Sydney Food Fairness Alliance 2007).

In the context of this study, “food insecurity” is defined as not being able to afford enough food or enough of the right food, and can involve clients worrying about food running out, cutting meal sizes, missing meals and experiencing hunger pains (Anglicare 2012). In NSW, 6.2 per cent of households had ‘run out of food and could not afford to buy more’ in the previous 12 months (NSW Child Health Survey 2001).

Children and older persons are most at risk from poor nutrition, and food insecurity may contribute to poorer health outcomes (Russell et al 2014). Relatively high levels of food insecurity have been identified in pockets of low income among South West Sydney residents (Nolan et al 2006).

The Foodbank Report (2016), based on data analysed by Deloitte Access Economics, stated that one in six Australians reported they had experienced food insecurity at least once over the last twelve months, and that over 644,000 people now receive food relief each month, 33% of whom are children. The report noted an 8% increase in the number of people seeking food relief during 2015.

Food insecurity is of particular relevance to frontline community nurses who interact with vulnerable groups such as young families and the elderly because food insecurity is generally associated with poorer health. Some adverse health outcomes attributed to food insecurity might include risk of poor health, developmental or behavioural problems in children (Ramsey et al 2011) which may affect their academic achievement, poor wound healing in adults (Australian Wound Management Association 2009), while over consumption of energy dense low nutritional foods is known to result in obesity (Innes-Hughes et al 2010).

Community health care sits within a primary health framework, based on the primary health care principles that encompass early intervention, health promotion, illness prevention, health management and client education (Baum 1998). Community health care is provided amid societal and healthcare change by skilled CHNs who work within a broad framework to sustain and improve health in the community (Van Loon 2011).

The Solid Facts (Wilkinson and Marmot 2006) outlines key aspects of people's living, work and lifestyle conditions, the social determinants of health (SDH) which have a powerful influence on health and well-being. The SDH include the social gradient, early life, stress, food and social exclusion.

METHOD

This study is a qualitative study using a descriptive design. Three community health nurses, working at community health centres in south west and south Sydney were interviewed by the author by phone, and their responses recorded. The three CHNs were asked if they use specific questions to inquire whether their clients are food secure. A focus group was held with two University of Tasmania (UTAS) nursing students during professional work experience (PEP) in the community. The students discussed their perceptions of food insecurity, how it is identified by community nurses, and whether they observed CHNs using specific questions to inquire whether their clients are food secure. The interviews were recorded and transcribed.

Ethics approval was received for this project.

RESULTS

It was found that CHNs may use informal processes to identify food insecurity. However, it remains unclear how they specifically identify whether their clients are food insecure in this context, and indeed if they do, what the outcome may be in terms of social determinants.

Two CHNs replied that they do not make a specific inquiry regarding food insecurity. One CHN replied that RNs do not ask specifically about food insecurity, however use the SAFE START psychosocial assessment questions pertaining to major stressors in the last 12 months 'such as financial problems' or 'other serious worries'. CHNs also ask specific questions regarding client's type of diet, recent weight loss, and functional assessments may be undertaken to assess a client's ability to shop and prepare food. An instrument such as the Malnutrition Screening Tool (MST) may be used to assess client's recent weight loss and loss of appetite was rarely used. The student nurses were familiar with the MST through studies at university, however, they did not observe its use by the CHN in the community.

It has been said that CHNs may use 'intuit' or observe whether the availability of food in the fridge (pers. com CHN, 2007). They do this by taking cues from the client's responses to questions, for example, about financial matters, and by observing the availability of food in the client's home, for example the presence of fruit and vegetables. The CHN may take the opportunity to make a cup of tea for the client, and note whether there is fresh milk in the fridge.

The focus group held with two UTAS students discussed their perceptions of food security while working under the supervision of experienced CHN.

The students discussed the importance of good nutrition for general physical and mental well-being, healthy weight and wound healing and identified barriers to food security relevant to the clients they encountered in the community. The students perceived that CHNs readily identified food insecurity but they could not specifically articulate how this was operationalised.

Themes emerged including access to shops, transport, awareness of nutrition and cooking skills, availability of adequate food preparation area and storage, clutter, social isolation, income, and how food needs may be interpreted by others shopping on behalf of the client. The students observed that some clients declined Meals on Wheels or assistance, preferring their own food choices and/or to maintain independence. While many clients lived in comfortable housing and were food secure, they observed some clients in poor living

conditions, a lack of fresh fruit and vegetables, some lived on 2 minute noodles, sugary drinks, while others had plenty of food, but the wrong type, for example baklava and tea.

The students did not observe CHNs asking the question “In the last 12 months, were there any times that you or your family ran out of food, and could not afford to buy more?” However, the students observed CHNs asking diet related questions regarding type of diet, recent weight loss, what the client may have for dinner that night, and conducting a functional assessment to assess client ability to shop and prepare food. The students perceived that the CHN observed food availability in clients’ homes informally, by observing the availability of food (in fridge and on benches). The students acknowledged there may be stigma associated with not having food in the house, and they felt it may be insensitive to inquire or probe, particularly among some cultures.

The UTAS students perceived that establishing therapeutic relationship between the CHN and client was paramount, and that CHNs possess skills to elicit and observe clients’ needs. The students also observed that CHNs have great understanding and knowledge about the needs of their client, with capacity to identify those needs. The students perceived that CHNs use informal means, and skills of intuition to assess the needs of their clients. This may link to ‘hidden practice’. However, they suggested that CHN could be provided with further education to enhance skills and assist them to further explore and elicit food insecurity with their clients in the community.

The students discussed ways in which to introduce a more open discussion about food security with clients for example by disclosing that as a student they had ‘run out of food and sought help’, and relating good nutrition, a balanced diet with family wellness, and improved wound healing.

DISCUSSION

Themes emerged related to social determinants (SDH) such as access, transport, education, isolation, housing, while further sub-themes emerged including therapeutic communication skills, education of nurses, and that CHN use a range of methods to explore client well-being and needs to assist recovery and maintain health.

Generally among those involved in this pilot, the CHN did not make specific inquiries regarding food security, or inquire whether “In the last 12 months, were there any times that you or your family ran out of food, and could not afford to buy more?”. It may be that CHN identify food insecurity by using other means including observation, ‘hidden practice’, ‘intuition’, indirectly through other formal assessments and eliciting information based on cues.

The student nurses acknowledged that ‘food insecurity’ is not commonly discussed, and they held reservations that it may be perceived by clients as ‘intrusive’ to ask directly whether there was sufficient food at home, while acknowledging the CHN should be comfortable to inquire in a respectful way, and make necessary referrals.

A preliminary review of existing psycho-social and physical assessment tools and documentation currently in use reveals there are no specific inquiries related to food security with regards to whether the client and/or family can afford adequate food to sustain a healthy life, or whether they have enough food. It is unclear from the literature reviewed how CHNs working in community health settings in Sydney determine specifically if their clients are food (in)secure.

Searches for professional CHN organisations undertaken through NSW Nurses and Midwives Association, revealed fewer professional organisations compared with other nurse speciality organisations, which is interesting in a climate of increasing emphasis of community based care (HealthOne, NSW Health 2006; Brookes et al 2004).

Consequently Koch (cited in Brookes 2004) claims that CHNs “have escaped scholarly scrutiny, (and) their voice has been weak in nursing matters”. A fair proportion of research utilised in community health practice is ‘applied’ research in the context of clinical care and outcomes, and research relevant to CHN tends to focus on health and well-being in ageing populations (Arbon and Cusack 2011) thereby excluding other vulnerable groups. Brookes (2004) found “there were conflicting role expectations” between health care sectors, and identified “underutilisation and untapped potential of the role of community health nurses”.

CONCLUSION

This project investigated how food security, as a key Social Determinant of Health is explored and identified, and how this process is perceived. Gaining further knowledge and understanding of current assessment processes, and how nursing students perceive this process, and depending on what is revealed, may provide opportunity to influence future education of nurses, CHN and community nursing practices.

The investigations in this study indicate that the subject of food security, how it is identified and explored by community nurses working in Sydney has not been investigated in this context before. Formal identification of food insecurity appears to be in the domain of dietitians in community and public health nutrition, community services, emergency food aid, and on preliminary investigation, appears to be outside the domain of CHN.

Yet CHN are at the forefront of providing complex and diverse care in the community, in an increasingly complex health system (Brookes et al 2004). Whether the skills of CHN’s are under-utilised with regards to identification of food insecurity among their clients in the community is unclear. In the context of this study, it remains unclear who else would formally assess client food insecurity, whether there are conflicting role expectations between health care workers and sectors, and whether there is untapped potential regarding the role of community health nurses.

On preliminary investigation, the question, “In the last 12 months, were there any times that you or your family ran out of food, and couldn’t afford to buy more?” (NSW Health, NSW Population Health Survey 2008; ABS, National Nutrition Survey 1995) is not asked by CHNs. This single item question is very specific to determine basic level of food security, while limited, (Russell et al 2014) may provide baseline information to better assess client/family need, consider appropriate interventions and referrals. Innes Hughes (2010) reported that community level reporting of food insecurity is neither widely discussed nor commonplace, and recommended that further research to collect information about people experiencing food insecurity be conducted to add to the overall knowledge about food security in NSW.

CHNs are in a key position to assess need, identify food insecurity with their clients, including young families, vulnerable groups, and the aged to consider intervention strategies and make appropriate referrals to improve health. It is undisputed that CHNs may identify food insecurity through formal and informal interactions with clients, and make appropriate referrals.

RECOMMENDATIONS

Further inquiries are required to investigate how Food Security as a key Social Determinant of Health is determined by professional CHNs working in Sydney, particularly as food insecurity is increasing. CHNs working at the frontline with young families, vulnerable groups and the aged are in a key position to contribute to this research, and development of strategies to influence practice and improve the health and well-being of their clients.

REFERENCES

- Arbon, P., Cusack, L. 2011. Using research and evidence in practice. Community Nursing in Australia 2nd ed. Eds. Kralik, D, van Loon, A. John Wiley & Sons Australia, Ltd.
- Anglicare Diocese of Sydney. 2012. Hard Choices: Going without in a time of plenty. <https://www.anglicare.org.au/sites/default/files/public/HardChoices> (accessed 05.08.2014).
- Australian Wound Management Association. 2009. Expert Guide for Healthcare Professionals: Nutrition and Wound Health. www.awma.com.au/publications2009_vic_expert_guide_nutrition_wound (accessed 13.09.2016).
- Baum, F. 1998. The new public health: an Australian perspective. Oxford University Press, Melbourne.
- Bickel, G., Nord, M., Price, C., Hamilton, W., and Cook, J. 2000. Guide to Measuring Household Food Security, Office of Analysis, Nutrition, and Evaluation, Food and Nutrition Service, United States Department of Agriculture (<http://fns.usda.gov/oane>) (accessed 02.04.2014).
- Brookes, K., Davidson, P.M., Daly, J. and Hancock, K. 2004. Community health nursing in Australia: A critical literature review and implications for professional development. *Contemporary Nurse*, 16(3):195-207.
- Centre for Epidemiology and Research 2008. Report on Adult Health from NSW Population Health Survey. Sydney NSW Department of Health 2009.
- Food and Agriculture Organisation of the United Nations. 1996. www.fao.org (accessed 02.04.2014).
- Foodbank Hunger Report. 2016. Australia <http://www.foodbank.org.au/wp-content/uploads/2016/05/Foodbank-Hunger-Report-2016> (accessed 28.10.2016).
- Innes-Hughes, C., Bowers, K., King, L., Chapman, K., and Eden, B. 2010. Food Insecurity: The what, how, why and where to of food security in NSW. Discussion Paper. PANORG, Heart Foundation NSW and Cancer Council NSW; Sydney www.health.usyd.edu.au/panorg/ (accessed 02.10.2014).
- Malnutrition Screening Tool 2015. Queensland Health. https://www.health.qld.gov.au/nutrition/resources/hphe_mst_pstr.pdf (accessed 28.10.2016).
- National Nutrition Survey: Nutrient values and physical measurement, Australia 1995 Australian Bureau of Statistics. Department of Health and Aged Care.
- Nolan, M., Rickard-Bell, G., Mohsen, M. and Williams, M. 2006. Food insecurity in three socially disadvantaged localities in Sydney, Australia. *Health Promotion Journal of Australia*, 17(3):247-254.
- NSW Centre for Public Health Nutrition. 2003. Food Security Option Paper. Sydney University www.cphn.biochem.usyd.edu.au (accessed 03.10.2014).
- NSW Child Health Survey. 2001. www.health.nsw.gov.au/surveys/pages/default.aspx (accessed 03.10.2014).
- NSW Department of Health. 2006. *HealthOne*, www.health.nsw.gov.au/healthone (accessed 28.10.2016).
- NSW Department of Health. 2009, NSW Health/Families NSW Supporting Families Early Package-maternal and child health primary health care policy. http://www.sfe.nswiop.nsw.edu.au/file.php/1/NSWHEALTH_SFEmaternal_ChildHealth.pdf (accessed 07.07.2014).
- NSW Department of Health 2009. NSW Health/Families NSW Supporting Families Early Package –SAFE START Strategic Policy (www.health.nsw.gov.au) (accessed 07.07.2014).
- NSW Department of Health. 2014. Sydney District Nursing Assessment Tool, Community Health Nursing Assessment (accessed 13.09.2016).
- Personal Communication. 2007. Community health nurse, Western Sydney Area Health Service.
- Ramsey, R., Giskes, K., Turrell, G. and Gallegos, D. 2011. Food insecurity among Australian children: potential determinants, health and developmental consequences *Journal of Child Health Care*, 15(4):401-416.
- Rosier, K. 2011. *Food insecurity in Australia: What it is, who experiences it and how can child and family services support families experiencing it?* Communities and Families Clearinghouse Australia, Institute of Family Studies, Commonwealth of Australia.
- Russell, J., Flood, V., Yeatman, H. and Mitchell, P. 2014 Prevalence and risk factors of food insecurity among a cohort of older Australians. *Journal of Nutrition, Health & Ageing*, 18(1):3-8.
- Sydney Food Fairness Alliance. 2007. *Understanding Food Insecurity: Why families go hungry in an affluent society*. www.sydneyfoodfairness.org.au (accessed 1.09.2014).
- Van Loon, A. 2011. *Community Nursing in Australia: past, present and future*, Community Nursing in Australia 2nd ed. Eds. Kralik, D, van Loon, A. John Wiley & Sons Australia, Ltd.
- Wilkinson, R.G. and Marmot, M. G. 2006. *Social determinants of health: the solid facts*. World Health Organization, Geneva. ISBN 978-9289013710.