RESEARCH ARTICLE

Development of a Family Nursing Model for Prevention of Cancer and Other Noncommunicable Diseases through an Appreciative Inquiry

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Abstract

Background: Cancer and non-communicable diseases are a major issue not only for the developed but also developing countries. Public health and primary care nursing offer great potential for primary and secondary prevention of these diseases through community and family-based approaches. Within Thailand there are related established educational curricula but less is known about how graduate practitioners enact ideas in practice and how these can influence policy at local levels. Aim: The aim of this inquiry was to develop family nursing practice in primary care settings in the Isaan region or Northeastern Thailand and to distill what worked well into a nursing model to guide practice. Materials and Methods: An appreciative inquiry approach involving analysis of written reports, focus group discussions and individual interviews was used to synthesize what worked well for fourteen family nurses involved in primary care delivery and to build the related model. Results: Three main strategies were seen to offer a basis for optimal care delivery, namely: enacting a participatory action approach mobilizing families' social capital; using family nursing process; and implementing action strategies within communities. These were distilled into a new conceptual model. Conclusions: The model has some features in common with related community partnership models and the World Health Organization Europe Family Health Nurse model, but highlights practical strategies for family nursing enactment. The model offers a basis not only for planning and implementing family care to help prevent cancer and other diseases but also for education of nurses and health care providers working in communities. This articulation of what works in this culture also offers possible transference to different contexts internationally, with related potential to inform health and social care policies, and international development of care models.

Keywords: cancer - noncommunicable disease - family health - nursing - models of care - Thailand

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Introduction

It is increasingly clear that non-communicable diseases (NCDs), including cancer, diabetes, hypertension and stroke, are important not only for the developed but also the developing world. In addition, cancer is an important cause of illness and mortality in Thailand and around the world (Duangsong et al., 2013; WHO, 2010). Prevention, caring, and recovery efforts depend on various family- and community-based interventions, theories and for these to be successful a participatory approach is necessary (Ahmadian and Samah, 2013; Al-Azri et al., 2014; Danawala et al., 2014; Erbil and Bolukbas, 2014; Jo et al., 2014; Lin et al., 2014; Sano et al., 2014; Sercekus et al., 2014; Simayi et al., 2013). However, realizing nursing and health caring that emphasizes family as a key focus of care within the family and community context can be a significant challenge for healthcare educators, practitioners and organizations (Kostak et al, 2014; Sercekus et al, 2014; Taylor et al, 2013; Yaakup et al, 2014). Accordingly it is important to learn from initiatives taken forward in this field. While such learning necessarily will focus on processes and outcomes of interventions for NCDs, building new knowledge also requires understanding of relevant cultural and contextual influences. This article reports on a study that has sought to synthesize learning from family nursing initiatives in Northeastern Thailand, with a view to informing understandings both locally and more globally.

Since the inception of organized professional practice, nurses in many countries have sought to develop nursing that has a particular focus on family care. North Amercia has been prominent in this regard (Friedman, 2003; e.g. Wright and Leahey, 2009) giving rise to several models of family nursing. Arguably this has pertained in practice primarily to more specialist nursing roles (Macduff,

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2005). Within Europe during the past 15 years a major attempt to develop a generic community-based family nursing role, the World Health Organisation Europe Family Health Nurse (FHN), involved 18 countries. Evaluation has shown a mixed picture of development and implementation (Hennessy and Gladin, 2006), with progress tending to be good in countries like Tajikistan where pre-existing primary care services were minimal in nature and scope (Parfitt and Cornish, 2007).

Within Thailand the family unit has traditionally been at the heart of culture and community, and family nursing education has formally been in place since 1987 when the Faculty of Nursing at Khon Kaen University offered the Master of Nursing Science Program in Family Nursing. Influenced initially by North American models, the curriculum emphasised the family as the unit of care for health promotion and crisis management in life-threatening and chronic illness. Thus family members of all age groups and the whole family system are included in order to promote family health and prevent health problems caused by risky conditions or avoidable situations. Inherent in this model is the belief that family health problems need to be addressed by advanced practice nurses who have in-depth knowledge and specialization in family nursing.

In more recent years the curriculum has been influenced by the more generic WHO Europe FHN concept with its primary care focus. The Family Health Nurse refers to a nurse who "helps individuals and families to cope with illness and chronic disability, or during times of stress, by spending a large part of their time working in patients' homes and with their families. Such nurses give advice on lifestyle and behavioural risk factors, as well as assisting families with matters concerning health. Through prompt detection, they can ensure that the health problems of families are treated at an early stage" (WHO, 2000). Faculty recognized the potential for development of family health nursing within communities in Northeastern Thailand. Since 2010, 14 graduates from the Khon Kaen course have been assigned to intervention programmes in Primary Health Care Units within communities in the Isaan region. As such this has provided opportunity to study what has worked well in practice during 2010-2013 and thereby address a gap in knowledge by synthesising a related Thai family nursing model grounded in context and culture.

Magterials and Methods

The study adopted an appreciative inquiry (AI) approach. Stemming from the original work of Cooperrider and Srivastva in 1987 (Cooperrider et al., 2008) involving the generation and analysis of qualitative data.

Theoretical underpinnings

AI is a research approach underpinned by the principles of democracy, participation and collaboration (Dewar and Mackay, 2010). The emphasis is on the starting point being to identify what works well (the discover phase). The second phase of the cycle is the dream phase involving envisioning what might be. The third, design phase involves planning whathat would work well and the fourth phase involves the implementation of the plan (destiny). Thereafter this process repeats with a view to progressive positive development. As Dewar and Mackay (2010) point out, the inherently collaborative nature of this approach has much in common with action research (AR). The initial discovery phase of the development under study can be seen as the incorporation of the FHN concept into the Khon Kaen curriculum (2008), while the dream and design phases evolved in 2009 when faculty and graduates explored how best the role might be enacted in programmes in local primary care settings. This article focuses on the experiences of the 14 nurses in implementing family care (destiny phase; 2010-2013) and the process of subsequent discovery (2013) whereby the findings were distilled into a new nursing model.

Data collection

Social media were used to offer an open invitation to graduates of the Khon Kaen programme to participate. Fourteen agreed to do so. Participants ranged in age from 28 to 52; only one participant was male. Most were married but three were single. All of them were born and raised in Isaan. Figure 1 gives overview of these nurses' areas of work, and the main components of the process of data collection and analysis.

As Figure 1 shows, the first stage of the data collection involved individual interviews held in Khon Kaen University. The first part of the interview explored nurses' experiences of successful planning and delivery of family care in their communities. Accordingly, questions were open- ended and probes were used. The second part asked participants to sketch a model reflecting their working experiences. This would serve as a basis for the researchers to distill a common model and to explore this further in focus group discussions. Interviews lasted 60-120 minutes and were audio-taped and fully transcribed.

The second stage of data collection involved obtaining the nurses' reports from their area of practice, and holding focus group discussions with the participants (two in total). Focusing on their models, these group discussions explored aspects of practice that they saw as working well and why this was the case (Kitzinger, 1995). Discussions lasted 90 minutes and were audio-taped and fully transcribed.

Following analysis of the interviews, reports and the focus group discussions, an initial summative model was

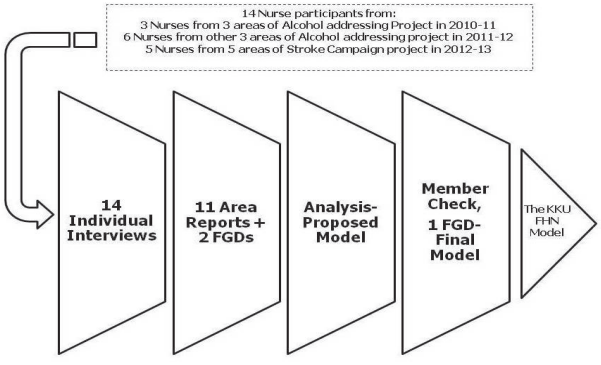

Figure 1. Overview of Data Collection and Analysis

constructed. This was then shared with all the participants in one final collective focus group resulting in minor refinements being made.

Data analysis

Themes were synthesised from the individual interview transcripts through qualitative content analysis informed by the work of Bryman (2001) and Graneheim and Lundman (2004). Manifest content was categorised as a basis for formation of broader themes relating predominantly to aspects of nurses' thinking and actions. A similar summative approach was

used with the text of nurses' reports and the transcriptions from the focus groups, leading to the construction of an integrative visual representation (model).

Rigor and trustworthiness

Analyses were carried out primarily by the first author in conjunction with five research assistants who were doctoral students. These researchers undertook explicit processes of checking understandings and interpretations. During the two discussion groups that focused on participants' models this involved checking initial themes with the 14 nurses themselves. In turn this enabled construction of a draft model that was refined in the final joint focus group. This form of ongoing member checking (Cho and Trent, 2006) provided primary validation of the emergent model.

Ethical considerations

As university guidelines viewed the study as programme evaluation, formal ethics approval was not required. However an information sheet was provided and all participants signed consent forms before taking part in the study. Permission to include quotes from focus group discussions, individual interviews and participants' reports on their projects was obtained.

Results

As can be seen, the model comprised three main thematic areas namely: 1) FHN conceptual framework guiding enactment, 2) Working through Family Nursing Process, and 3) Key Effective Action Strategies.

Conceptual framework guiding enactment

Connections and capital:

As the right upper quadrant, number 1, of Figure 2 suggests, the participants typically referred to four levels of care: level 1 Health Promotion, level 2 Early Detection, level 3 Direct/Care, and level 4 Rehabilitation. This suggests that participants' thinking in practice in the Thai Isaan context was influenced both by the WHO Europe curriculum they had learned and by the participant's connection to the Thailand health services concepts including Prevention, Promotion, Treatment, and Rehabilitation, a familiar source of guidance of their working.

"*Yes, I think that we got achievement under the functional framework of holistic care and family health nurse of four levels of care*" (Ms. J)."*Anyway, we are familiar with Thai health care concept including health promotion, early detection, direct and care, and rehabilitation. We can rather see the line of care and degree of illness…(such as cancer)*" (Ms. Y)."*We, the team have a process that is guided by the program. We come together with the same goal in mind*" (Ms. P).

The latter sense of sharing a common goal emerged strongly across focus groups and individual interviews, highlighting the potential for harnessing nursing capital. A key feature was respecting families as integral and coequal parts of the health care team.

"*All of us were taught to do family nursing based on holistic views throughout graduate study life, thus this is automatic performance of us to do so*" (Ms. K).

This linked to three underpinning principles that are depicted surrounding the triangle in part 1 of Figure 2. Participatory action was essential and was manifest firstly in understanding local contexts and cultures that might influence behaviours linked to NCDs such as cancer:

"*We know that drinking becomes normal lifestyle and being continued since the past to present. Moreover, Loei people believe in supernatural power. Alcohol is used as connector between human and ghost. First step, we surveyed and did the situational analysis. Based on this step we found risk communities and recruited the participated community*" (Ms. T)."*We found that working with villagers had to have an effective strategy. Sense of belonging is the key idea of our approaches*" (Ms. C).

A second strong principle to emerge was basing action on community social capitals:

"*We have mobilized the community social capitals as much as possible, for example monks teachers, and school students. These human capitals helped to campaign in various forms such as street campaigns, change agents, and informers. They felt that it was the community members that started this for the members* (Ms. K). "*Role modeling was a technique we used effectively. Such as Mr. T, is not a real enthusiast for the community's sake, but he is an enthusiast for what he did. We approached him and he could stop drinking. Giving him a community role modeling award, this was extremely valuable*" (Ms. Y). "*At the community hall, people sit and chat about disease prevention. For example, some of them discussed about eating that nowadays life is busy and buy fast food from market and has been contaminated by chemical. Eating chemical foods causes kinds of cancer*" (Ms. E).

Within this context nurses often worked as facilitators

"*We, nurses did an important function as a facilitator. We facilitated the health volunteers or health leaders to increase their abilities to be a gate keeper for their neighbors to prevent, care and rehabilitate stroke patients. Feedback I got were something like; Am…that is the difficulty with knowing what is reasonable to do and what is silly to do…And some people told me that they just know that weak legs are not because of their sins but because of their health behaviours. Some health volunteers proudly feedback that they thank nurses to support them to have abilities doing home visits effectively. They know how to talk and inform the families on the right ways*" (Ms. Je).

All participants indicated that they provided intervention to promote a "Healthy Family" at different levels of care i.e. individual, family, and community level, as well as from level 1 of intervention to level 4 of intervention. Healthy family was perceived by participants as a multidimensional idea and a key goal for nursing practice:

"*Family members concerning their culture, spirit, pleasure, being united, being together, good health, wellness, human resources, and good relationships*" (Ms. Ma). "*The thing we try to do is keeping family and members wellbeing. Culture, and tradition of Isaan is very good. They have strong relationships, which we have to continue*" (Ms. S).

The nursing process, depicted in Number 2 area of Figure 2, was the key tool for participants' assessment and interventions at individual, family, and community levels. All participants agreed that this nursing process encouraged their critical thinking and creativity and permitted solving problems in professional practice. One key informant said:

"*I think we were used to intervention based on the family nursing process, it is quite also convenient for us that the program provided the KKU family assessment package helping us to assess the family needs*" (Ms. Y).

Moreover, the KKU package included family assessment scales for assessing family structure and function, roles, development and task, family resources, coping, to identify the family weakness and strength.

The participants expressed their experiences of identifying a nursing diagnosis, for example:

"*I am responsible for family care for stroke patients project. Results of the family assessment let us to know that they had no knowledge of the dangerous signs leading to be paralyzed*" (Ms. Yu). "*A key barrier to cancer screening and early detection is cancer fear. I know the case of breast cancer. She came to see a doctor when it was too late. So the project let us to campaign the warning signs and symptoms*" (Ms. O).

Thus, nursing diagnosis identified knowledge deficit and related need to provide information regarding focused disease warning signs to not only the family members but also throughout the community. This led to family and community education sessions on the important disease warning signs, informing villagers that the sooner the treatment.

One vital process in the family nursing process was family intervention. In addition to family education, eight main categories of interventions were delivered: family conference, counselling, psychological support, professional support, redefining roles, family involvement, support groups, and role modelling. This is evidenced in the following quotations:

Family conference-"*throughout the project we set weekly home visits for target families. This intervention attempted to train the family to have effective family communication and enhanced problem solving skills. Our goals are to maintain or improve upon the function of the family as a unit*"(Ms. P).

Family counseling-"*this kind of intervention can be delivering at the family's homes or appointment doing so at our primary health care unit. We do not attempt "advice giving" to the family. We focus on helping family members to learn about themselves and to use what they learn to make real and significant changes in themselves*" (Ms. K). "*The psychological support, we focus on family member emotion or for the family unit. This intervention is important because the emotions of each member of that family greatly affect the wellbeing of the whole unit*" (Ms. J). "*Professional support is our routine work and we collaborate among multidisciplinary team. For example for stroke patients we weekly arrange them to meet with physiotherapists to help rehabilitation*" (Ms. Je).

Different possible aspects included in professional support were establishing a caring relationship, providing available resources, consultations, phone conferences, home visitation, advocacy, and long term involvement.

Redefining roles

"*We just share ideas with them about who can do the roles of the patient ever did, at least temporarily. Usually Isaan families are poor, and earn a living day by day. One of the family members has to work as a labourer. Once he or she gets sick, this income is disappeared. So we need to discuss the flexible roles with them what is best to solve this issue*" (Ms. P).

Family involvement

"*Oh! they are always having family involvement in our project. They will assign a family member to get roles of a care giver with no benefit. Some care givers have to quit their jobs to do so and other members provide money support instead*" (Ms. C)."*The problem is the family members caring for the patient do not take a break from this task. Thus they get burden. We have to persuade other members to turn over the role intermittently*" (Ms. Ma).

Support group: The nurses often set up and facilitated support groups. In addition, support groups in the alcohol project were conducted by health volunteers who were nominated via community fora. Each health volunteer was assigned to conduct family groups who were staying nearby:

"*Setting up support groups help them being trusted among them. Moreover, they can help each other such as taking the patient to a doctor's appointment when the patient's family members are not available*" (Ms. N).

Role modeling: Role modeling gives an example of how something can be accomplished:

"*We used role modeling as a key tool to promote family health. As such, our project was working to reduce harmful alcohol drinking. So we award the epitome of those who can quit alcohol. Thus we were not only showing the person how to accomplish their goal, but we showed them that someone else was able to do it. These will make an inspiration for others that they too can do it*" (Mr. B).

Key Effective Action Strategies

The last main element in the model is Key Effective Action Strategies, depicted in area number 3 in Figure 2. The eight such strategies that were seen as being key to success emerged as being interlinked. Finding the host and proposing the issues are priorities:

"*Starting with finding the host of assignments and covering villager households in the community. Then we conducted training and workshops for them. These volunteers would be gate keeping for us. They became health promoters and health messengers. Because they are neighbors so people have trust to them. And informal family visits with deep conversations on the given health issues by these volunteers helped the positive evaluation*" (Ms. N).

Thus the nurse may sometimes direct caring from a distance and be busy with the more strategic and participative spread of information as evidenced previously in this article. The building of trust as mentioned above is key to risk reduction and successful rehabilitation.

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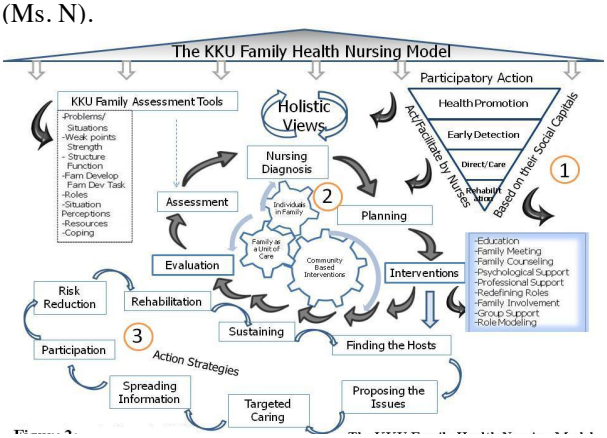

Figure 2. The KKU Family Health Nursing Model

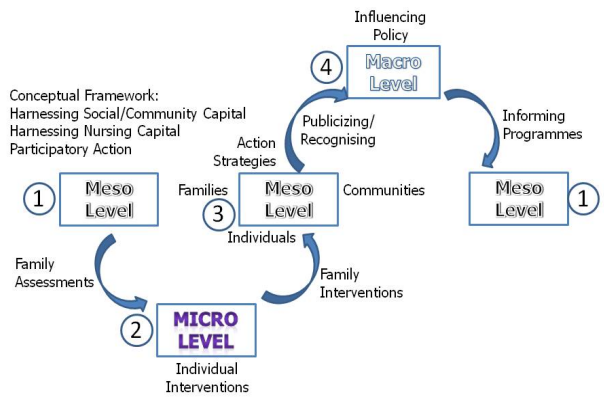

Figure 3. The Memimema Model

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One of the most important elements is sustainability

"*We also concern about sustainability of this activity program, which is the problem of sustainable development in our country. Anyway, we got positive evaluation and high satisfaction outcome of the villagers. So our local administrator committee decided to put this project for annually funding support. This helps the local primary health care unit continue the activities*" (Ms. T).

Ongoing evaluation and feedback is key to this process

"*We place importance on participation of local villagers at all levels. After the first survey, we present findings to the villagers via the community forum and got feedback, collaboration, volunteers' name nomination, and direction of work planning*" (Ms. K). "*Every month we report the project progress to the villagers via the monthly community forum. This scheme was so useful because we can get collaboration and suggestion of activities from them*" (Ms. Y).

Discussion

The data collection, analysis and synthesis undertaken with these 14 graduate family nurses represents a further discovery phase in the cycle of the appreciative inquiry process. In turn this discussion examines the model further and envisions related implications.

The model's mix of the conceptual with the practical, and its mix of community with family perspectives, brings richness and flexibility. Applications at a number of levels are possible. In this way it shares some similarities with more internationally established community nursing models such as The Community Partnership Model (Anderson et al., 2014) that are also underpinned by principles of community engagement and action. However, the new KKU model combines this with a

distinct focus on the what and the how of family nursing.

Our findings suggest the potential of the synthesized model as an approach to creating health educational knowledge and empowering villagers in reducing health risks of cancers. These findings are consistent with other studies of disease prevention and cancer care in Asia. For example, Jo and others (2014) found that fear and negative attitudes toward cancer screening were a key barrier of early detection among Koreans. While another study in Oman found that the majority of respondents were not aware of the common risk factors for cancer and suggested developing strategies to educate the public about cancer risk factors to reduce the incidence of them (Al-Azri et al., 2014). Lin and others (2014) found that the telephone counselling services for caring of cancer persons could be an effective means in Taiwan. Ahmadian and Samah (2013) suggested that application of Health Behavior theories to breast cancer screening among Asian women would help them to be motivated to seek out and engage in individual preventive actions for breast cancer prevention. In addition, a study by Sano and others (2014) in Japan proposed that sending personal invitation letters were most effective in improving cancer screening rates for early detection of breast cancer. Moreover, Taylor and others (2013) reported the successful experiences of using community health workers to educate Cambodian American population about Hepatitis B.

From our nurses' accounts it is clear that they were largely satisfied with the ability they had to enact family nursing in these community based initiatives. This is encouraging as this has not always been found to be the case when nurses have gone forth to try to implement principles and ideas that have been inculcated through education. This was true for a number of countries that took forward the WHO Europe FHN concept (Hennesy and Gladin, 2006). Enacting a new role in a system essentially predicated on primary care of the individual and/or with little active support from already busy colleagues is a demanding challenge (Macduff, 2005).

It may be that Northeastern Thailand's existing primary care infrastructure is substantive enough but also flexible enough to enable the sort of community and family nursing work described above. Moreover it certainly seems to be the case that the Isaan region, and arguably Thailand as a whole, is well suited culturally to this sort of approach. Kinship and extended family relationships are very important in Isaan context. Isaan people prefer to rely on a sum/jum, or a group of people who live in the same village. When somebody is sick, people give advice about treatment, provide financial assistance for example loaning them money without interests to see a doctor (Jongudomkarn et al., 2008). Thus when family members have health problems, family involvement and community involvement are often practiced.

The study findings indicate that families were willing to participate in the interventions as well as engaging with health problems of their family members. In everyday life, it is sometimes difficult to balance the needs of family life with the specific requirements of health problem care. So information related to health needs and demands and balancing strategies are helpful for families to understand and cope with demands effectively. Nevertheless in our nurses' discourse on interactions with families, women usually emerged as the key members taking responsibility, especially in relation to the alcohol problems that predispose to many NCDs including cancer. In this sense the research suggests that change in gender roles is slow in Thai society.

In reflecting on the study findings and the emergent model it is also important to highlight less explicit aspects. In one of the quotations above the family nurse refers to giving a role modeling award. This sort of recognition giving was in fact seen at a number of levels within and beyond these programmes. A number of the healthcare assistants and participating community leaders were granted awards by the Thai Ministry of Public Health, while some participating community villagers received awards from the Ministry of the Interior. Moreover the achievements from programmes were often displayed in regional newspapers and on television channels.

Perhaps due to the inherent modesty in Thai culture or because they were taken-for-granted, these aspects were not often highlighted explicitly in participants' models. However they are important when considering implications for nursing and healthcare policy. As Bryant (2011; 2012) highlights, globally nurses are the key resource for enabling access to primary care services and the key source of information for populations and their service provider organizations. As can be seen from our study, these family health nurses were not only enabling access for families and communities, but also harnessing associated social capitals. Indeed the latter aspect was the starting point for our family nurses.

This key point is portrayed in Figure 3 which seeks to highlight the potential for wider knowledge transfer and policy influence arising from this work.

The above model called Memimema is offered as a way of considering integrated meso, micro and macro level activities that promote family, community and importantly policy development. As can be seen, the latter aspect is emphasised between the meso and macro levels in the model, with recognition giving and publicising enabling policy influence and informing related programmes. Importantly this was a feature of a number of the Thai primary care programmes in that continuous funding was secured through the National Health Insurance Scheme and expansions of the programme were subsequently supported in other provinces. In turn this highlights the importance of sustaining these activities through integration as mainstream healthcare provision. In this way it is possible to envisage local and regional developments influencing the national healthcare agenda, with nursing in the vanguard advocating family and community needs. The appeal and currency of such a vision pertains well beyond Thailand. (Kunavikticul, 2014).

Sustainability is also an important theme within the KKU Family Health Nursing Model, indicating that the nurses were aware of this inherent requirement. Within the Isaan region the KKU model is being used within curricula for preparing new family nurses. KKU graduate family nursing students can use the model as a framework to: analyse planning of community care interventions

and as a basic framework for the case assignment of the family nursing studies e.g. to gain insight into a family with NCDs such as cancer.

The limitations of the research relate to its small size and the fact that all nurses were known to one of the researching authors who was formerly their teacher. This may have engendered some perceived desire to please in their responses, although conversely it may have resulted in more comprehensive and rich material. Nevertheless there is considerable scope for further research to evaluate and refine both of the models presented above, testing application to various contexts of Thailand and in other countries and cultures.

In conclusion, through appreciative inquiry this research has highlighted what can work in practice for family nurses who start from a community social capital perspective. This was seen to have value for families and communities and to open up possibilities for influencing policy. The two resultant models presented in this paper offer bases for informing practice, education, policy and further knowledge transfer research.

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