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Feature

Continuing nursing education policy in China and its impact on health equity

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Continuing nursing education policy in China and its impact on health equity

The aim of this study was to evaluate the mandatory continuing nursing education (MCNE) policy in China and to examine whether or not the policy addresses health equity. MCNE was instituted in 1996 in China to support healthcare reform was to include producing greater equity in health-care. However, the literature increasingly reports inequity in participation in MCNE, which is likely to have had a detrimental effect on the pre-existing discrepancies of education in the nursing workforce, and thereby failing to really address health equity. Despite a growing appeal for change, there is lack of critical reflection on the issues of MCNE policy. Critical ethnography underpinned by Habermas' Communicative Action Theory and Giddens' Structuration Theory were used to guide this study. Findings are presented in four themes: (i) inaccessibility of learning programs for nurses; (ii) undervaluation of workplace-based learning; (iii) inequality of the allocation of resources; and (iv) demands for additional support in MCNE from non-tertiary hospitals. The findings strongly suggest the need for an MCNE policy review based on rational consensus with stakeholders while reflecting the principles of health equity.

Key words: critical theory, health policy, inequalities in health, nurse education, professional development.

Mandatory continuing nursing education (MCNE) was instituted in 1996 in the context of healthcare reform in China in order to meet increasing demands from the public for accessible, affordable and high-quality healthcare services (CMOH 2000). The healthcare reform, based on socialist market-oriented healthcare services, was started in the 1990s during which healthcare organizations were developed into self-sustaining organizations largely initiated by means of competition in the provision of health services (Bloom and Gu 1997; Liu, Hsiao, and Eggleston 1999). However, after more than a decade-long trial of the reform, there was a realization that it had failed, with the failure mainly attributable to the growing health inequity between the rural and urban areas (World Bank 2005; Gao 2006). Meanwhile the literature relating to MCNE increasingly reports unequal learning opportunities, unequal distribution of learning resources and learning coercion (Edwards, Zhou, and Song 2001; Chen and Wu 2005), which may ultimately enlarge theses existing nursing workforce discrepancies between the rural and urban areas and therefore contribute to maintaining, or even increasing health inequity.

Although China has made a great effort to reduce poverty since the economic reform of the 1980s, it still has 'the second largest concentration of extreme poor in the world' after India, with the majority of the poorest population living in rural areas (World Bank 2009, 17). A body of evidence shows that 'the poorest of the poor, around the world, have the worst health' (CSDH 2008, 31). Therefore, closing the health gap requires a government's action. Nurses play a key role in delivering primary care and are therefore most likely to be prepared to combat poverty-related diseases and health issues. This study, by reporting on a study that evaluated MCNE policy and its implementation in China, intends to raise awareness about interweaving

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relationships between nursing education policy and health equity through the perspective of a developing country.

BACKGROUND

Public health policy is stated as 'an explicit concern for health and equity in all areas of policy and by accountability for health impact' (WHO, cited by Baum 2008, 545). Health equity is defined as 'the absence of unfair and avoidable or remediable differences in health among population groups defined socially, economically, demographically or geographically' (WHO 2007, 7). MCNE policy was developed in China to regulate the licensing of registered nurses (RNs) for public protection (CMOH 2000). It is one of the categories of public health policy and should reflect the fundamental principle of health equity.

The Chinese healthcare system demonstrates huge discrepancies in health services and resource distribution between the urban and rural areas. Maternal and child mortality, the government's expenditure on healthcare, and medical insurance are key indicators used by WHO to compare health-care between countries or between the rural and urban areas (Wagstaff et al. 2009). Table 1 shows consistently higher maternal deaths, infant deaths and under-five deaths in rural areas than in the urban areas of China (CMOH 2009). In 2009, the government's health expenditure per capita was estimated as 348.5 Yan in the rural areas, compared with 1480.1 in the urban area (CMOH 2009). There was no government-sponsored basic medical cover for all citizens in China before 2007. The 'Medical Accumulation Scheme' covered only employed people, with only half of the population living in cities being covered by this scheme (CMOH 2008a). Eighty per cent of the population in China live in rural areas and had no medical insurance before the commencement in 2007 of the new medical insurance reform entitled 'National Rural Cooperative Medical Scheme' (NRCMS) (CMOH 2008b). The rebate under the NRCMS is still very low and people with no ability to pay bills for medical treatment were therefore virtually excluded from even seeking treatment (World Bank 2005; Gao 2006).

As indicated in table 2, healthcare organizations are categorized into three levels according to their functions and resources in the system. Tertiary hospitals are located in urban areas and have better educated nursing staff when compared with non-tertiary hospitals (CMOH 2005; World Bank 2005; Gao 2006). Tertiary hospitals take advantage of their technological and human resources to attract consumers, which raises revenue for their further development. Primary and secondary hospitals, which most need to be developed in order to carry out WHO's goal of access of all to primary care, face collapse and shrinkage of services as a result of these competitive losses.

There are three pathways to gain RN registration in China: (i) 3-year study at the secondary education level;

Table 1 Maternal and child mortality by urban and rural areas in 2007 and 2008

	The total		Urban		Rural	
	2008	2007	2008	2007	2008	2007
Maternal deaths (1/100 000)	34.2	36.6	29.2	25.2	36.1	41.3
Under-five deaths (‰)	18.5	18.1	7.9	9.0	22.7	21.8
Infant deaths (‰)	14.9	15.3	6.5	7.7	18.4	18.6
Newborn deaths (‰)	10.2	10.7	5.0	5.5	12.3	12.8

Source: Data from CMOH (2009).

Table 2 Selected standards used in accreditation for different levels of hospitals

The categories of healthcare organizations	Location and population served	Size of organization with requirement of nurses with tertiary education
Primary healthcare organization	Mainly serving people dwelling in villages, township	20–99 beds
Secondary healthcare organization	Mainly serving people dwelling in counties	100–499 beds, 30% nurse with tertiary education by 2010
Tertiary or first rank tertiary healthcare organization	Mainly serving people dwelling in municipals	Above 500 beds, 50% nurses with tertiary education by 2010

Source: Information from CMOH (2005).

(ii) 2-year study to upgrade the secondary education to a diploma; and (iii) 4-year university study for a Bachelor degree (see table 3) (CMOH 2008b). The rural areas have a larger proportion of RNs holding a secondary education certificate (74.4%), than those in the urban areas (57.7%) (CMOH 2009). Current MCNE policy, by promoting capital-city-centered MCNE programs, further increases the existing nursing workforce discrepancies that stem from the original discrepancies in education preparation. To gain the requisite 25-credits in MCNE usually requires participation in approved learning activities involving approximately 90–160 study hours (CMOH 2000), with the 25 annual credits categorized into two types. Type 1 is the higher type of credits and these cannot be replaced by Type 2 credits. RNs must attain 3–10 Type 1 credits and 15–20 Type 2 credits annually. Only small numbers of medical universities and their teaching hospitals, which are mainly in capital cities, are accredited to provide Type 1 programs. In addition only tertiary hospitals have the authority to offer Type 2 credits. All non-tertiary hospitals have been completely excluded as program providers.

Currently, these credit requirements cannot be met by the majority of RNs. Type 1 programs require fees for registration, and money for transport, accommodation and considerable study leave. Only nursing administrators, mainly from the tertiary hospitals, are able to enroll in these programs with their organizations' support (Chen, Xu, and Wang 2003). Most RNs have never attended a Type 1 program. RNs employed by non-tertiary hospitals are not even able to meet Type 2 credit requirements (Chen and Wu 2005; Li et al. 2006).

Continuing nursing education has been established in other countries, for example in the USA, but there it is structured quite differently. For more than a century, 26 American states have had MCNE policies (Whittaker, Carson, and Smolenski 2000), which in contrast with the Chinese system requires only 20–24 study hours over a 2-year period (Lazarus, Permaloff, and Dickson 2002). Mandatory continuing professional development (MCPD) was established in the UK in 1995 (Nursing and Midwifery Council 2002). There the RNs are required to attend CNE programs for only 5 days in 3 years (or 35 study hours) to keep a personal professional profile or portfolio and to have practiced at least 100 days in the previous 5 years (Nursing and Midwifery Council 2002). It acknowledges any learning activities undertaken, including informal learning and unpaid nursing practice, as long as they have the potential to provide acceptable learning for re-licensure. However, apart from the access, there is also the question of cost, both in terms of time and affordability. Compared with the USA and the UK, China's annual study requirement of 90–160 hours is a huge cost to the individual, and a substantial burden for a developing country.

There is an argument that rational decision-making for public policy formulation should be based on 'a comprehensive analysis of all alternatives and their consequences' (Hill 2005, 146). Evidence utilized to support decision-making should be clearly articulated in a sociopolitical context. Values, beliefs and interests held by policy-makers all have a very strong impact on decision-making (Baum 2008). In a power-asymmetric society, how these policy-makers share values, beliefs and common interests with multiple stakeholders will largely determine how well the policy works in that country. Debate and consultation with reference groups are common practices used to support rational and inclusive decision-making in policy formulation in MCNE (Carpenito 1991; Whittaker, Carson, and Smolenski 2000). However, the MCNE policy document in China produces no information on decision trails, or records of debates or of consultation. Highly centralized and top-down policy decision-making is evident. Rather than rational consensus, such an approach may indicate the use of power and ideology in policy development.

Table 3 Registered nurses' education in China

Levels of education	Pre-requisite	Duration of study (full time)	Qualification
Secondary	Junior high school	3 years	Certificate
Diploma	Senior high school plus passing NTEE or RN plus passing ANTEE	2 years	Tertiary diploma
Bachelor degree	Senior high school plus passing NTEE for BSN or RN plus passing ANTEE	4 or 2 years for RN held diploma	BSN

NTEE: National Tertiary Entry Examination; ANTEE: Adult National Tertiary Entry Examination.

METHOD

The aim of this study was to evaluate MCNE policy in China and to examine whether it is conducive to health equity. As the review of Chinese literature revealed, policy development was formed by means of a highly centralized, government-based policy process, Habermas' Communicative Action Theory and Giddens' Structuration Theory were applied to inform the theoretical framework guiding the practice of critical ethnography. These theories concentrate on analyzing how ideology, power and social structures either enable or inhibit social practice. The methods used were field-based study with multiple approaches for data collection, consisting of in-depth interviews, participant observation, informal conversations with program participants and a two-round Delphi study.

Theoretical underpinnings

A fundamental difference between interpretative ethnography and critical ethnography is that the former tries to reconstruct actors' own world-views in their everyday lives through a field study, whereas the latter moves further to critique how ideology, power and social structures contribute to the actors' views and practice (Carspecken 1996). A theoretical framework that builds on critical theories provides a lens to enable the researcher to consider the truth and justice underlying social practice. In this study, the theoretical framework is an integration of Giddens' Structuration Theory and Habermas' Communicative Action Theory.

Social structure as used in Giddens' Structuration Theory refers to 'rules and resources' associated with the exercise of power over people's actions (Giddens 1984, 25). The rules in the theory are either formal (laws and legislation) or informal (tactical norms or formulae). Resources are divided into allocative and authoritative resources, with the former concerned with the material resources used to control nature, and the latter concerned with the capability of harnessing human activities. Social structures and people's actions are not separated as 'a dualism', but are 'a duality', inseparable and shaping each other (Giddens 1984, 25). Structures enable the channeling of people's actions in a specific manner, but, however, may also constrain people's rationality. Therefore, the outcome of peoples' actions will include both 'intended consequences' and 'unintended consequences'. Conversely, this theory acknowledges that people have the capability, generated from a 'reflexive form of knowledgeability' (p. 3) to modify structures in order to improve practice. Figure 1 was developed to demonstrate the 'duality' relationship via means of human reflexive circles.

This theory can be transferred into empirical research to examine the rules and resources set in MCNE policy, which may either enable or inhibit people's practices through the 'double hermeneutic of social life' (Morrow and Brown 1994, 156): that is, the participants' perception of the rules and resources with a fusion of the participant's and the researcher's perceptions. In this study, such a 'double hermeneutic' occurred after two rounds of Delphi study: consisting of in-depth interviews and participant observation. Structuration Theory, however, focuses mainly on the conditions of material and human capability in social practice, though with less orientation to ideology and the relations of power embedded in these conditions.

Habermas believes that the unique nature of human beings as both toolmakers and language users ensures that social labor occurs under both conditions, that is, in terms of manipulating nature in the material world and communicative action in the life-world (Habermas 1972). Communicative action based on an ideal speech situation is an emancipatory form by which 'the organization of society is linked to decision-making processes on the basis of discussion free from domination' (Habermas 1972, 55). Communicative action is described as action aimed at reaching understanding, and is therefore the fundamental process by which to reach a rational consensus (Habermas 1979). This theory acknowledges the impact of ideology, power relations and conflict of interest on social practice.

This theory can be applied to analyze how ideology and power relations impact on policy formulation and implementation. In order to reach a rational consensus for changes in MCNE based on health equity, it also informed the design of egalitarian dialog with the key stakeholders in this study. Communicative Action Theory, however, is criticized as being too utopian to be conducted in an ideological asymmetric society where ideological domination is unavoidable (Held 1980; Giddens 1984). When combined with Structuration Theory, this study (see figure 1) demonstrates the extent to which it overcame such weaknesses by producing evidence associated with the rules and resources that usually sustain ideological domination and power relations in MCNE policy development.

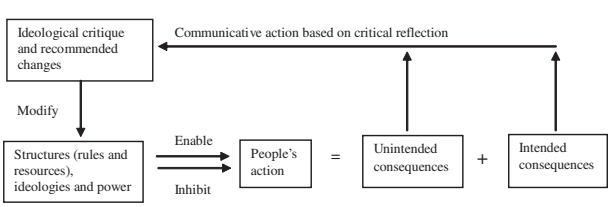

Figure 1 Research design based on Structuration Theory and Communicative Action Theory

Research design

Critical ethnography is developed by using interpretive ethnography with the use of multiple data collection methods through a field study. This methodology adopts a bottom-up approach to policy evaluation to reveal an aspect of the socially and politically constructed nature of the inequity in MCNE and its fundamental impact on the healthcare system. Methods used to collect data were via means of a 5-month field study in six CNE programs in China, and included observation, in-depth interviews, document analysis, informal discussions in five programs and the researcher's reflective journals (see table 4). All participants in the study were Chinese speakers; and the researcher, who is bilingual Chinese and English and was a nurse educator in China before this study, used Chinese during data collection and translated data from Chinese to English after collection. A two-round Delphi study was conducted to engage a group of nurse leaders in discussing the issues and their perspectives on the policy changes in MCNE. The ethics committee of the university, within which the researcher was enrolled for PhD study, and the Chinese Minister of Health (CMOH) approved this study. Free informed consent was obtained before both observation and interviews. Anonymity was assured, given the context in which free speech on Chinese government policy still remains quite sensitive, even within the context of study.

Using five-point Likert scale questionnaires and open-ended questions, the first round of the Delphi study was conducted before fieldwork in the six Chinese venues of the CNE programs. The questions were mainly generated from a literature review and were not specific to individual problems (see examples in table 5). The issues of concern identified in the first round of the Delphi study were further explored in the six venues of the programs, and in the second round of the Delphi study. A purposive sample of 40 nurse leaders was approached by mail with forms returned by 22 of those in the first round. Participants for the Delphi study were selected through the CMOH website of approved national-level program providers, and through informants. The response rate was 55%. These participants represented provinces of north, south, east and southwest of China. Demographic information about the participants in the Delphi study is provided in table 6. The second round of the Delphi study was conducted once the researcher had completed the field study. The researcher analyzed the data from the first round of Delphi study, and the major issues identified from the six venues of CNE programs. These results were presented for participants when conducting the second round of Delphi study. The second round of the Delphi study mainly comprised open-ended questions in which participants were encouraged to recommend changes to MCNE (see table 7).

Table 4 Data collection activities

Field studies (F)	Document analysis	Observations	Interviews	Informal talks	Questionnaire
F1: Delphi study round 1	No	N/A	No	No	Yes (22)
F2: web-based program for XX specialty (a national program)	Yes	N/A	1	30	No
F3: Advanced practice in XX, XX and XX areas (a national program)	Yes	Yes	2	3	No
F4: Advanced practice in XX care area (a national program)	Yes	Yes	2	10	No
F5: A training program for nursing administrators (a provincial program)	Yes	Yes	2	12	No
F6: Nursing document: how to write appropriately (an onsite program in a secondary hospital in a rural area)	Yes	Yes	2	6	No
F7: Be aware of factors affecting safe practice in clinical nursing (an onsite program in a secondary hospital in a urban) area	Yes	Yes	2	8	No
F8: Delphi study round 2	No	N/A	N/A	N/A	Yes (22)
Total			11	69	22

Table 5 Demographic information about participants

Participants	No.	Gender	Age (mean), years	Education (no.)	Position (no.)	Experience in MCNE (mean), years
Delphi study	22	Female	35–55 (42)	Diploma (12) Bachelor Degree (8) Master Degree (2)	Dean and NPD (4) DoN and NPD (6) DoN and PPD (5) DoN and HPD (7)	4–7 (6)
In-depth interviews	11	Female	25–46 (38)	Secondary (4) Diploma (5) Bachelor Degree (2)	DoN and NPD and PPD (4) DoN and HPD (3) Head Nurse (4)	2–7 (4)

DoN: Director of Nursing; NPD: national program developer; PPD: province program developer; HPD: hospital program developer.

In the field study, 10 program providers were invited to participate via means of a letter of invitation. Six program providers responded to the invitation and were contacted to arrange the researcher's participation in these programs and research activities. These programs consisted of a national-level web-based MCNE program, two national-level MCNE programs, a provincial-level MCNE program and two hospital-level MCNE programs. The venues of the six programs crossed north, southwest and south of China. The web-based program was available for participants across China over the space of a year, and the researcher interviewed only the program providers. National and provincial programs were 5-day programs. The researcher participated in these programs and stayed in hotels where the program participants also resided. Through close contact with program participants in these accommodation venues, the researcher was able to discuss issues with them in quite an informal manner. The researcher participated in the two hospital-level programs, examined documents pertinent to MCNE and had informal discussions with the directors of nursing who took charge of MCNE. Six program providers and five program participants from these selected programs were formally interviewed, using a semi-structured interview guide. Interviews were audio-recorded and transcribed verbatim. The research activities are summarized in table 4.

Data analysis and interpretation were carried out through three steps informed by the theoretical framework built into this study:

Step 1: identifying factors that contradict equal working force development and health equity as described by participants;

Step 2: critiquing rules and resource distribution that either enable or inhibit equal nursing workforce development and health equity by the means of MCNE, based on dialogs with participants and by applying Structuration Theory to guide the dialogs;

Step 3: critiquing the power and ideology that legitimate rules and resource distribution that fail to address equity in MCNE and health equity; then exploring changes in MCNE that address equal nursing workforce development and health equity, by applying Communicative Action Theory.

Thematic analysis was applied to the interview data and open-ended questions from the Delphi study. Descriptive statistics were applied to summarize the quantitative data from round 1 of Delphi study using PASW statistics 17 (IBM, Chicago, IL, USA). Findings from the three-step analysis were synthesized and presented as themes in a coherent manner.

Rigor

Critical research is viewed as rigorous when the research can generate catalytic validity for changes (Lather 1991). Catalytic validity is defined as 'the degree to which the research process re-orients, focuses and energizes participants towards knowing reality in order to transform it' (Lather 1991, 68). Rigor in this study was demonstrated through egalitarian dialogs with key stakeholders about issues of concern and rational consensus on how to improve MCNE. It was anticipated that they might either advocate policy changes or make some positive changes in MCNE in the future. In addition, on the completion of this study, the researcher was invited to present major findings from this study at a national conference focusing on nursing education. As the majority of participants in the conference were nurse leaders, the researcher hoped that the presentation might facilitate further discussions about the improvement of MCNE policy in the future.

Table 6 Issues of concern in MCNE from the first round of Delphi study (n = 22)

	Strongly agree (%)	Agree (%)	Undecided (%)	Disagree (%)	Strongly disagree (%)
To what extent the current MCNE is able to support nurses' abilities as listed in the table					
1. Direct their lifelong learning		50	41	9	
2. Seek learning resource		64	27	9	
3. Integrate learning with nursing practice		68	27	5	
4. Deal with legal and ethical issues		46	50	5	
5. Think critically		32	64	5	
6. Develop leadership in workplace		27	55	18	
7. Problem solving skills		55	32	14	
8. Advocate on behalf of clients		32	55	14	
9. Understand cultural differences and apply to practice		50	36	14	
10. Understand clients' experience in coping with health issues and diseases		50	45	5	
11. Communication skills with clients, their family and other health professionals		59	32	9	

Please list issues you are concerned about

1. Healthcare organizations have difficulty in supporting nurses to attend fee-paid programs due to lack of budget for MCNE
2. Accessing CNE programs for nurses is unequal due to limited funding and difficulty in getting study leave
3. Nurses work in small cities or rural areas have geographic difficulties in attending CNE due to lack of program supply at the local level
4. MCNE deteriorates shortage of RNs as nurses demand study leave for CNE programs
5. For many nurses, participating in programs is motivated by meeting credit requirement, rather than improving practice
6. CNE programs are not always beneficial for the improvement of patient care due to lack of connection between learning and practice
7. There is a lack of standards for accreditation and evaluation of CNE providers, CNE programs and learning materials
8. Providing programs for marketing profit exists
9. Re-licensure policy are not always followed as RNs with unqualified credit are still able to obtain re-registration
10. A lack of research on developing competence standards impedes the exploration of relevant programs for nurses regarding their level of practice and specialties

FINDINGS

Generally, participants in the Delphi study gave relatively low scores to the MCNE relating to the development of crucial abilities in patient care, and showing some concern relating to issues arising from the first round of Delphi study. These were clarified in the six venues of programs (see table 4). Findings are a synthesis of the three-step analysis and are presented as four themes:

(1) inaccessibility of learning programs for nurses,

(2) undervaluation of workplace-based learning,

(3) inequality of the allocation of resources, and

(4) demands for additional support in MCNE from non-tertiary hospitals.

Inaccessibility of learning programs for nurses

Although the MCNE policy set detailed credit requirements for re-licensure, these requirements were modified due to the failure, by most nurses, to achieve them. Even RNs employed by richly resourced tertiary hospitals are unable to meet the required Type 1 credits, as a nursing administrator explained:

> Most nurses in my hospital cannot gain study leave and financial support to attend Type 1 programs. We never

Table 7 Top three barriers in MCNE and suggestions from the second round of Delphi study

Top three barriers	Suggestions for policy improvement
1. Unrealistic credit requirements	1. Establishing taskforce for policy review
2. Discrimination against workplace-based learning	2. Establishing an advisory group by including representatives from different levels of health-care
3. Unequal allocation of resources	3. Organizations and different regions
	4. Establishing nursing education unit in tertiary healthcare organization and full-time a nurse educator' s post to conduct MCNE
	5. Establishing consortium of CNE at district level for sharing teaching and learning resources
	6. Ensuring every nurse has right to gain basic support to participate in CNE by policy initiatives
	7. Creating funding to support RNs from rural and remote areas to participate in CNE programs

> audit the type of credit, but accept the total of 25 credits from any type of program for re-licensure. (Fieldwork [F]2, Participant [P]2)

I spoke with program participants on an informal basis, confirming that only the total of the 25 credits, and not a proportion of either Type 1 or Type 2 credits, could be used for re-licensure, promotion and renewal of contracts. Participants in the Delphi study (see Table 4) were also concerned about the non-compliance with MCNE policy. Such amendments are evidence of pragmatic resistance by stakeholders to the unachievable credit requirements. However, there has been neither investigation of the actual conditions for re-licensure, nor reflection on this amendment during the entire 10 years of MCNE. A disconnection between policy formulation, implementation and evaluation was evident, and continues to contribute to unresolved problems in MCNE.

Even in a capital city, the supply of programs is insufficient, so RNs have little choice but to attend the programs available for them, as explained by a nursing administrator:

> The Nursing Association in the city allows nurses to buy a card to attend programs to gain credits. Another option is to enrol in online programs. According to their [nurses'] attendance record, it is not unusual that they attended similar programs twice a year for meeting credit requirements, or programs which are not relevant to their practice. (F5, P1)

This case indicates the learning coercion that threatens the entire 'competency' purpose of MCNE. Such situations were even worse in non-tertiary hospitals, as revealed in an interview with a nursing administrator from a secondary hospital:

> Meeting credit requirements is one of the necessary conditions to pass the annual appraisal for promotion and renewal of contract … We have received complaints that some nurses have enrolled in a program without actually attending the program … It would be unfair if we punish them as we do not give them study leave, nor do we provide any program. (F6, P3)

Owing to social sanctions, ordinary RNs had little ability to change the way they learnt. Their passive behavior in giving silent, pragmatic consent to unachievable credit requirements by buying credit or by repetition of programs simply for the credit best represents their coping strategies in their professional lives. Confronting such a situation does not require further coercion to be imposed on these 'autonomous nurses', but rather they should be relieved from it by viewing them as 'masters of their own learning'.

These examples clearly reveal that rules in terms of Type 1 and Type 2 credit requirements are unachievable due to the lack of support by other stakeholders (healthcare organizations in this case) and through inadequate resources. Developing such an unachievable policy and failing to amend the rules through evaluation in more than a decade are evidence of the government's ideology-based policy decision-making mediated by administrative power, with so little action taken to validate such an ideology.

Undervaluation of workplace-based learning

Participants clearly described the value of workplace-based learning, in linking learning with practice, and felt frustrated by their 'unrecognized' learning in secondary hospitals:

> I gained my expertise in diabetic nursing care through ward-based learning. It is the best way to gain knowledge when the learning group has similar learning needs. We can always apply what we learn to patient care and make

> changes to improve quality of care … Unfortunately, these activities do not gain any credits because secondary hospitals have no jurisdiction for providing programs. (F6, P3)

This case clearly reveals RNs' genuine interest in participating in workplace-based learning, which is clearly also a more economic and efficient way to develop their knowledge and competencies. Nursing administrators from non-tertiary hospitals, whom I interviewed and talked with informally, strongly suggested that this particular learning arena was the most suitable one in which to acquire specialist knowledge in a peer-supported environment. In this arena, RNs were more motivated to learn, immersed as they were in the professional culture, while still able to reflect instinctively on their practice. Participants agreed that these learning activities were utilized as a major means to support professional growth for most nurses and should therefore be acknowledged by the MCNE policy.

This learning approach is endorsed by healthcare organizations, as stated in another interview with a nursing administrator from a secondary hospital:

> In order to survive marketing competition, two hospitals merged. There are significant job changes for nurses. Experienced nurses seemed to become novices. The hospital recognised the need for ward-based learning and acknowledged it as part of MCNE by taking a risk against the credit policy. (F7, P3)

All participants in the Delphi study (see table 5) and those in the interviews agreed that workplace-based learning was used as a strategy to support organizational change during the restructuring of organizations in the recent healthcare reform. As the purpose of these programs was to re-educate nurses to be competent in a new healthcare environment, both organizations and individual nurses stand to benefit from this learning approach. Participants from non-tertiary hospitals strongly suggested that this type of learning should be officially acknowledged by the MCNE policy.

These examples clearly show that the rule, in terms of giving only tertiary hospitals the jurisdiction to provide Type 2 programs, suppressed any development interests that non-tertiary healthcare organizations may have had, and their nurses' genuine interests in undertaking competency development in the workplace. It appeared that the non-tertiary hospitals would have had the resources to conduct their own workplace-based learning activities. Again, by setting the rules in MCNE without justifying them by carefully analyzing other stakeholders' interests, is once again evidence of using administrative power in policy development, rather than understanding of needs of the various stakeholders.

Inequality of the allocation of resources

By promoting capital-city-centered programs, MCNE policy reinforces the existing unequal distribution of resources for workforce development in healthcare between rural and urban areas. This was identified in the Delphi study (see table 4) and also in the interviews, as stated by two nurse administrators from different levels of hospitals:

> Our hospital is accredited as a national continuing education provider and we have programs year round. They [the nurses] can meet the credit requirements without attending outside programs. (F3, P1)

> Our hospital is a secondary hospital in a rural area. On-site programs provided by nursing administrators to nurses depend on whether the hospital sends the nurse administrators to attend outside programs. They are required to re-present the programs for all nurses who are unable to attend programs. (F4, P2)

Observation in two of the on-site programs in fieldworks 4 and 5 (see table 3) confirmed that these programs were attended by two nursing administrators in provincial-level programs and were then re-presented in their hospitals. Indeed, a general strategy of exempting RNs from rural and remote areas from MCNE has been used, which may either generate or increase health inequity, as implied by this nursing administrator from a rural hospital:

> We work in isolation compared to nurses in urban areas and we do need extra support to update our knowledge and skill in order to keep the local medical services going … Our patients are peasants with lower incomes and cannot afford medical treatment in urban hospitals. They depend on our local medical services. (F6, P2)

Historically, there is a huge gap in health services between rural and urban areas in China due to long-term lower investment in health-care in rural areas, and also owing to little or no medical cover or welfare for peasants. Delivering additional resources in MCNE in these areas is one way to develop more equitable health-care.

Unequal learning opportunities were identified as the consequence of lack of strategies to ensure that every RN has access to basic resources in MCNE, and the use of a marketing economic model in health service, as stated in two interviews:

> Wards with better contributions to the hospital's revenue can gain more funding to support doctors and nurses to attend outside programs. (F5, P3)

> Nursing administrators have a privilege in accessing fee-paid programs because they are viewed as contributing more to the hospital revenue than ordinary nurses. (F7, P2)

Observation of enrollment records in two national programs and one provincial program confirmed that indeed all

participants were nursing administrators. This phenomenon of nursing administrators, in particular those employed by tertiary hospitals, being privileged to attend programs through means of their organizations' support allows only a small proportion of RNs to attend programs, thereby making it even less achievable to reduce health inequity.

The rule that only a few tertiary hospitals mainly in capital cities are accredited to provide Type 1 programs is associated with the ideology of an elite-dominated education, which highly contradicts the principle of equal access to continuing education. In addition, if we are to close the nursing workforce discrepancy between urban and rural areas, allocating the already limited resources to those who have already been well-educated, further marginalizes those who most need CNE.

Demands for additional support in MCNE from the rural area and non-tertiary hospitals

Based on collaborative critical reflection on these unintended consequences in MCNE, and through egalitarian dialogs with participants in interviews and from the second round of the Delphi study, suggestions for change were obtained for improving equity in MCNE (see Table 5).

A nursing administrator in a secondary hospital in a rural area suggested the following changes:

> Although doctors and nurses in our region are exempted from MCE, the hospital employs two retired medical doctors from [XX] University to support continuing medical education in order to develop medical services and keep local people with us. Nurses attend these programs. (F6, P2)

This case demonstrates that rural areas do need additional support in MCNE, rather than exempting CNE, as set in the policy. Consulting the nurses from rural hospitals in all stages of policy development is one way of promoting equitable workforce development through an educational approach.

Suggestions on how to build sustainable structures and develop resources to promote quality in MCNE to set out achievable learning requirements for all RNs, including those working in rural areas was a major part of our discussion. The suggestions included the following:

> My experience in both public and private hospitals told me that tertiary hospitals should have an education unit and fulltime educators in order to address the quality of education. Each district should have a CNE centre to be able to share resources and programs between tertiary and non-tertiary hospitals. (F2, P2)

Basing practice of MCNE on a local governance model that includes representatives from various levels of healthcare organizations maybe an economical way to support both non-tertiary hospitals and rural areas to implement MCNE. Such a model was also suggested for developing online programs, as two of the participants explained:

> I [an online program writer] wrote these programs based on my understanding of nurses' learning needs in my hospital … I don't have any opportunity to contact participants except by submitting written programs to the web-based CNE Centre by e-mail. (F2, P1)

> Although online programs provide flexible learning, they are only available in a few specialties and are mainly suitable for nurses working in tertiary hospitals. Perhaps representatives from non-tertiary hospitals should be included in online program development. (F7, P2)

These examples clearly reveal that the MCNE policy has not yet established rules and resources that can enable the MCNE to support workforce development in rural areas and non-tertiary hospitals. Based on my experience in dialoguing with participants in this study, it was not difficult to know exactly what the healthcare organizations and nurses in the rural and non-tertiary hospitals expected from MCNE. In other words, if conditions for conducting egalitarian discussions with multiple stakeholders are met, or if the only force to facilitate the agreement of MCNE policy is the force of better argument without coercion, a health equity-oriented MCNE policy may possibly be developed.

DISCUSSION

Health inequality exists in any healthcare system whether in developed or developing countries and governments over the world face numerous challenges if they are to address the issues of health equity (CSDH 2008). However, developing countries face even greater difficulties if they are to close the gap of health equity, due mainly to their less well-developed healthcare systems and their fewer resources. Therefore, developing countries particularly need to make ethical decisions for resource allocation through policy formulation in terms of whether they tackle poverty-related poor health, or whether they choose to make richly resourced hospitals even richer. Findings from this study reveal that such a decision is only likely to be achieved through egalitarian discussions that represent/include the disadvantaged groups in a country. Establishing a reference group that includes RNs from rural areas and non-tertiary healthcare organizations generates at least a structural validity for MCNE policy development. Findings from this study suggest that Communicative Action (Habermas 1979) in the presence of multiple stakeholders can indeed be used as a normative

approach to minimize ideology domination in public policy development.

Developing nursing ideology can help nursing professionals to argue their ideas and practices in developing a competent nursing workforce and to debate hegemonic ideologies. Given the dyadic nature of ideology, nursing ideology should be updated regularly, from a base of communicative action-grounded ideological critique. Suggestions from participants in this area include developing standards and the scope to govern the teaching and learning, and self-regulation in MCPD. Traditionally, nurses have not been prepared to fully engage in the process of policy decision-making and debate (International Council of Nurses 2005), particularly in developing countries where decisions are made predominately by the very few in a highly centralized administrative system. As nurses play a key role in primary care, they should be competent enough to advocate health equity on behalf of their clients. One way to act on promoting health equity is to influence and shape the public health policy. Findings from this study suggest that the ability to critique ideology, develop nursing ideology and initiate structural changes is one of the key attribute of leadership, given the dyadic nature of ideology, and the power of social structures on people's action (as shown in figure 1). However, these leadership attributes have not yet been discussed, nor built into the nursing curriculum in China. Future studies should focus on this area.

It is extensively reported that policy implementation deficits are a common challenge for policy-makers due to the complexities of the issues (Hill 2005). One-off decisions on public health policy formulation cannot deal with the complexities involved. Incremental policy development through interactions between policy-makers and stakeholders is strongly recommended (Baum 2008). Policy evaluation is one way to study policy implementation and to support incremental policy decision-making (Hill 2005). Findings in this study strongly suggest a formal review of the current MCNE policy and incremental policy development in conditions that generate agreement among multiple stakeholders and being based on a rational consensus.

Controversies in terms of learning for meeting required study hours, and for continuing competence have been discussed in the literature in the early stage of MCNE in both the USA and the UK (Carpenito 1991; Lazarus, Permaloff, and Dickson 2002). Flexible learning styles and focusing on competence development had been addressed in the further development of MCNE policy. Self-directed learning, peer review of practice, workplace-based learning and developing a personal learning portfolio have all been endorsed by professional bodies to encourage participation in CNE (American Nurses Association 2000). Both the various members' engagement in consultation and debate in the formulation of policy, and its implementation and evaluation played a key role in the further development of CNE policies in these countries.

In China, as in other developing countries, the majority of the 254 million people who live in extreme poverty live in rural areas (World Bank 2009). Tackling poverty-related diseases and health issues cannot be successful without building a competent nursing workforce in these rural areas. The ratio of RNs to the population is 1.03:1000 in China (CMOH 2003), which is among the lower ranks of developing countries and indicates a vast shortage of nurses (Buchan and Calman 2004). The ratio of RNs to the population in rural areas is 0.55:1000 and much lower than that in urban areas (CMOH 2003). It is most unlikely that healthcare organizations in these areas will release RNs to attend capital-city-centered programs. Findings from this study suggest that nurses from rural areas are most in need of CNE. Therefore, the goal set in 'the 11th plan for the next 5 years CME' (CMOH 2006) should be rewritten to ensure participation of 100% of RNs in rural and remote areas, rather than 60% of them, so that they have an opportunity to gain CNE appropriate to their learning needs.

CONCLUSION

By utilizing a critical framework to guide critical ethnography for MCNE policy evaluation, together with a two-round Delphi study, this study identified that the current MCNE policy is merely maintaining existing nursing workforce educational discrepancies, and therefore potentially maintaining the health inequity in China. Inappropriate credit requirements and resource allocation in MCNE have been identified and analyzed. The power relations and ideology that legitimate these requirements and resource allocations have been critiqued. Findings from this study strongly suggest that one way to improve public health policy is to integrate principles of health equity by engaging in policy and dialog with key stakeholders. This study, however, was limited due to the use of context-dependent qualitative data, and so the results cannot be generalized, but may, however, be applied to similar situations.

This study was enhanced by the integration of two critical social theories that demonstrated methodological advantages to analyze and critique the dialectical relationships between social structures, power relations and ideology, and people's action. Such methodology is particularly important for a developing country where structures and

resources to support public policy development through democratic processes are still imperfect. Although the critical ethnographer wishes to catalyze changes through a critical research project, changes may not happen at all due to the complex nature of practice change in policy development, and its implementation in a society where ideology and power are so imbalanced. In addition, changes largely depend on a degree of action being taken to influence policy development by those who are the most affected by the current MCNE policy.

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