



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



ELSEVIER

Severe acute respiratory syndrome outbreak promotes a strong sense of professional identity among nursing students

Y.Y. Jenny Heung^{a,*}, K.Y. Frances Wong^{b,1}, W.Y. Enid Kwong^{b,2},
S.S. Tony To^{c,3}, H.C. Daniel Wong^{b,4}

^a Room, FJ623, Hong Kong Community College, Polytechnic University Hung Hom, Kowloon, Hong Kong

^b School of Nursing, Polytechnic University, Hong Kong

^c School of Nursing, Hong Kong

Accepted 2 November 2004

KEYWORDS

SARS;
Professional identity;
Nursing identity;
Reflective learning

Summary This is a phenomenological study that examined nursing students' perception of nursing professional identity during severe acute respiratory syndrome (SARS) outbreak in Hong Kong in 2003. The aim of the study was to find out how the impact of the SARS event might have affected nursing students in identification with the nursing profession. A total of 10 nursing students were interviewed. This study showed that the SARS crisis enhanced a reconstruction of worldview and affirmed the professional identity of nursing students. Central themes derived from the interview were (1) appreciation and sharing of nursing identity; (2) a sense of moral duty; (3) a change of worldview and feeling of self-growth. This study provided insights to nursing education that acquisition of professional identity could be enhanced through reflective appreciation of critical events such as SARS.

© 2004 Elsevier Ltd. All rights reserved.

Introduction and background

This is an account of a phenomenological study examining nursing students' perception of nursing professional identity during severe acute respiratory syndrome (SARS) outbreak. The study was a qualitative one involving interviews with a convenience sample of 10 nursing students.

Hong Kong was put on world stage due to SARS outbreak in Spring, 2003. In connection with this

* Corresponding author. Tel.: +852 2766 4808 (Office); fax: +852 2364 7375 (Office).

E-mail addresses: ccjenny@inet.polyu.edu.hk (Y.Y.J. Heung), hsfwong@inet.polyu.edu.hk (K.Y.F. Wong), hsenid@inet.polyu.edu.hk (W.Y.E. Kwong), hstto@inet.polyu.edu.hk (S.S.T. To), hsdaniel@inet.polyu.edu.hk (H.C.D. Wong).

¹ Tel.: +852 2766 6419 (Office); fax: +852 2364 9663 (Office).

² Tel.: +852 2766 6385 (Office); fax: +852 2364 9663 (Office).

³ Tel.: +852 2766 7932 (Office); fax: +852 2364 9663 (Office).

⁴ Tel.: +852 2766 4417 (Office); fax: +852 2364 9663 (Office).

event, nurses were portrayed by the media as heroic, self-sacrificing and having a strong sense of morality (([Oriental daily, 24/6/03](#)); ([Mingpao, 24/4/03](#)). During the SARS crisis, 386 health care workers contracted the diseases out of a total of 1755 victims. Of these 240 were nurses and one nurse subsequently died (([Health, Welfare & Food Bureau, SARS Bulletin, 23/6/03](#)).

Nursing students in Hong Kong during this critical period were removed from all clinical placements in different training hospitals. The main reason was safety and the other reasons were that they were neither covered by health insurance for this kind of epidemic disease nor seen as competent enough to help. Even senior students were restricted from placement in hospitals. In this regard, they might have experienced feeling of own inadequacy as well as unachieved professionalism. Since nursing jobs certainly held elements of risk when caring for SARS patients, especially undetected cases, nursing students at this moment were likely to be motivated to clarify their devotion to and reaffirm the meaning of nursing to them.

Through this unique crisis experience, we were interested in finding out how the impact of this SARS event might have affected these learners in identifying with the profession. From an educational point of view, we wanted to see how this study could help enrich and strengthen the development of professional identity.

Importance of professional identity

On one hand, building up a positive professional identity is crucial in attracting and retaining quality nurses; on the other it helps students confirm their career choice early in their program ([Cook et al., 2003](#)). After all, it highlights the ethical nature of the professional culture that ultimately leads to quality future practice. [Law and Arthur's study \(2003\)](#) showed that perceptions of nursing significantly affect career choice of Hong Kong high school students. [Spouse's \(2000\)](#) interviews with British nursing students indicated that holding a positive nursing image helps sustain motivation and retention in the nursing program. [Ohlen and Segesten \(1998\)](#) affirmed that professional identity is foundational to the assumption of various nursing roles. [Glen \(1998\)](#) assured that professional identity with inherent ethical virtue contribute much to quality nursing practice. Given the current increasing public demand of high quality care in Hong Kong, professional and motivated nurses are in great need. Therefore, it is of deep concern

for nursing schools to recruit and retain students who are capable and contented with their nursing identity.

Review of the literature

Professional identity in this study was defined as self-identification with a profession. A sense of identity is defined as an organized understanding of how our personality trait, values, and beliefs fit together in defining who we are ([Seamon and Kenrick, 1987, p. 398](#)). "Professional identity refers to the nurse's conception of what it means to be and act as a nurse; that is, it represents nursing students' philosophy of nursing. As such it serves as a basic frame of reference in nurses' deliberation and enactment in nursing..." ([Fagermoen, 1997, p. 435](#)) "Professional identity is defined as the values and beliefs held by a nurse that guide nursing students' thinking, action and interaction with patients". Hence, values are inherent in establishing professional identity.

With a model of personal and professional development, [Glen \(1998\)](#) posited that the existence of professional identity is contingent on personal identity. She argued that an individual develops a sense of personal identity by appropriating beliefs, emotions and motivation that are socially appreciated. [Fagermoen \(1997, p. 435\)](#) stated that "professional identity emerges through a process of self-formation in which social interaction and self-reflection are the basic processes". She opined that working as a nurse involves a realization of self, at the same time, nurses are being perceived by society as responsible for patients' well-being, they are required to be other-oriented in thoughts and actions. Based on these interlink relationships, personal as well as professional identity, with appropriation of social appreciated values, is established through a reciprocal process of social interaction. In between, self-reflection of own thoughts and actions are the key to the processing of both personal and professional identification.

[Bruner and Kalmar \(1988\)](#) suggested that reflective activities such as self talk and narrative recounts on life stories enhance self formation. This self formation is subject to periodic transitions which are often triggered by emotionally powerful life events ([Magai and Nusbaum, 1996](#)). The process of periodic and incidental recounts of "who am I?" helps to revise and extend a self-organizing systems in form of emotional and cognitive processing ([Lewis and Ferrari, 2001](#)). In other words, it is through this integration of cognitive and emotional

components during a reflective process that leads to organizing of personal and professional self.

Aims of the study

The aim of this study was to address the question: *'How would nursing students perceive professional identity during the SARS outbreak?'* Subjects were asked: *'What do you think about nursing and being nurses during the SARS outbreak?'*

Sample and data collection

This study used a convenience sample. There were a total of 10 subjects; all are undergraduate nursing students. The students were fully informed of the purpose and the procedure of the study. They were invited for interview on a volunteer basis. They were free to decline to participate any time and clear explanation was given beforehand to assure that anonymity and confidentiality were protected. The students were interviewed in groups of three to four. Some of the senior student participants attended community volunteer works such as dispatching health pamphlets; SARS information hotline; health exhibition; counseling of relatives of SARS victims etc. during the SARS outbreak. They provided more data related to their contact with the public. Data was obtained by interview.

Research approach and data analysis

This is a phenomenological study which attempts to uncover the perceptions that nursing students attached to what is nursing identity in the context of the SARS outbreak. The research approach is to reveal the *essence* of what it means to subjects pertaining to their lived experiences. Crotty (1996) stated that phenomenology seeks to render lived experience intelligible. Phenomenology is about addressing, identifying, describing, understanding and interpreting the experiences people have in their day to day lives.

The perceived world of students in this study was investigated through experiential descriptions in terms of feelings, meanings, perceptions and reactions to the events. Essential themes pertaining to various domains of interpretation were derived from these descriptions in an attempt to capture and characterize the unique experiences.

Participants were encouraged to articulate what new understanding can be found related to their experiences as nursing students facing SARS crisis. Open-ended thematic interviews were conducted

by three researchers. The interviews were tape-recorded and transcribed verbatim for analysis. Approximately 10 h of audiotape resulted in over 40 pages of transcripts. A collaborative approach to analysis was employed. Intensive discussions on the phenomenological themes of the lived experiences were made among the research team, insights and understandings were derived from the data. The themes were examined, analyzed, re-interpreted and reformulated as appropriate during the process as suggested by Miles and Huberman (1994). A range of themes were sorted and these are reported as below.

Findings

Three main themes were generated from the data. They were: (1) Appreciation and sharing of nursing identity. (2) A sense of moral duty. (3) A change of worldviews and feeling of self growth.

Appreciation and sharing nursing identity

A number of subjects emphasized the impact of SARS. They found that they became aware of the importance of nursing roles and they valued health.

One reported:

To review all those three years of nursing education, SARS is the most impressive experience. The event made it clear to me what is nursing. Though every one knows that health is important, at this moment, I can see how important it is. All of a sudden, a lot of negative emotions are coming up. I understand more about the importance of nursing and I ascertain I will continue my career in nursing.

Another noted that there is a call for quality and certain requirements for nurses. She suggested:

Nurses should widen their scope of services. In this critical condition, I see there will be a lot of unknown epidemic diseases coming up. What is most important to nurses is non-stop learning. They should always keep their knowledge updated ... I think the most important quality of nurses is willingness to accept changes and to renew ...

One of the respondents appreciated staff nurses who took risk of life for others and understood that the nursing job would involve altruistic elements. She accounted:

Nurses are not able to stay at home. They need to work for over 10 h. This is touching because they could only talk to their relatives through telephone

A number of participants were warned by their parents not to take any SARS related volunteer work. They needed to rethink and make options whether they took on the identity of nursing or ordinary people. They needed to strike a balance between their obligation to family and society.

One student, who had shown hesitation before whether to continue nursing training accounted:

I know some other nursing students are thinking of withdrawal from nursing, they are at cross roads and rethinking the job nature of Nursing. Half of our group did not continue with clinical placement because of lacking Personal Protection Equipment, N95 in clinical areas. They perceived high risk inward I thought of withdrawal from Nursing, because infectious disease might come one after the other. Apart from SARS, we have to take risk of contracting MRSA; Hepatitis B. My family advised me to think about that as well. At this point, I have to critically think about this. As times go by, I become more and more determined to stay in the profession.

Several students repeated the same themes that they were having a sense of pride being nurses and accounted:

They (Nurses) are being great,
They are being heroic
HK nurses have already illustrated Nurses' spirit
Being proud of our nurses

Several, who joined volunteer works during SARS outbreak, felt the respect given by the public and shared the nursing identity.

One of the subject accounted: Public welcomed us when we told them we are poly-U Nursing students. They smiled to me, stopped and listened to me. They showed respects to us. I feel that expectation from public is very high. I feel I have great responsibility I was asked a lot of questions by public, I was treated as a nurse consultant.

A sense of moral duty

Some students seemed to have a strong sense of morality. They considered that they were obliged to help as there was an imminent need for help from society. In addition, they resented being labeled as "passive" university students. They expressed their discontent with self-centered people.

One of them, who attended volunteer work accounted:

I did not want to worry my parents, so I did not turn up for voluntary work that day. And then, I felt regret. I am a higher diploma year III student, I will be a registered nurse next year. This SARS looks so close to me. I am annoyed by the rigorous comment from internet that university students nowadays no longer take up the social responsibility ... Finally, I joined the voluntary work. At that moment, I felt the solidarity and a sense of belonging as a Poly-U nursing student. It is of imminent need from society, and I have knowledge and skills, if I am not going to help (joining volunteer work), who is going to?

Embraced with a strong sense of morality, one of students reported:

I am especially resentful to those peers who always think of own benefits, only worry about delayed placement or registration as Registered Nurse. They should think of their obligation. As a member of society, they should be clear of what the most critical thing to do at this moment ... Majority of HK people are self-centered, demanding, they always draw benefit from the government, but never think of own obligation. I feel shamed that University students are always accused of being passive.

Change of worldview and feeling of self-growth

Having a sense of uncertainty experiencing the SARS crisis, and a feeling that government and community sectors were not dealing with the crisis well, most of the students reported that they felt they understand more about the things and the people around them and they felt suddenly being grown up:

Under this critical situation, the most important thing I can see is that everything is changing. Life is uncertain ... Every level of the society should go for a reflection: Hospital Authority, schools, community and every single person ... All HK people should take care of their health. We should put emphasis on health promotion and education. Although there are a lot of people died, I am upset. I am sure all HK people will take note of health promotion and education.

Actually, HK is inadequate in health promotion. People focus on their work, not their health ... This time, they will shift their focus to maintenance of health, to keep fit and to maintain personal and environmental hygiene

One accounted her feeling of self growth:

I feel suddenly being grown up, I understand much more. I am thinking of family and career, future prospect and social obligation. I feel I have wider perspectives, not merely thinking of myself, but thinking of the future ... I should value life and time

Another showed positive attitudes when facing uncertainty and they accounted:

Problems are of multiple components and perspectives. We should allow a wide variety of ideas expressed among people ... The public take SARS much more fearful than we do. I understand why they are so fearful, because they are in fear of unknown ... I can show my positive perspectives through message board and sharing, showing people how I can eliminate risk by taking universal precautions.

Discussion and implications for nursing education

Referring to the themes identified from above, a sense of closeness and pride in being nurses were developed among respondents; a professional identity was affirmed through appreciation of nursing jobs; and a sense of morality was held by nursing students. They recognized the value of nursing. The essence of the values reflected in these interviews was commitment to the profession and moral responsiveness to society. The SARS experience affected their view through alerting them the unknown risk of life and the value of health. They acknowledged the vulnerability of life with deep thought and further appreciated health related work. They were getting to recognize the value of nursing as a profession that concerns other's life and being altruistic in nature.

The findings also suggested a reorientation of interviewees' worldviews. Here, the worldview refers to "assumptions about the world in which we operate have come to constrain the way we see ourselves and our relationships" (Boud et al., 1985, p. 23). Students reported a sudden awareness of self being grown up and made a review of

their own career; life and family. Moreover, participants commented on the inadequacy of the government, individuals and community sectors in handling SARS. This suggests nursing students' searching of their own positions and their relations to society. The SARS crisis challenged a person's views of the values of life and their relations to others. The event triggered a re-evaluation of the values and roles of self and society. All these findings confirmed with what Fagermoen (1997, p. 435) mentioned "professional identity emerges through a process of self-formation in which social interaction and self-reflection are the basic processes."

The findings related to the theme: "a sense of morality" are highly loaded with emotional terms such as "I felt upset"; "I am especially resentful..."; "I feel the solidarity..."; "I feel shamed..."; "I felt regret." etc. while the students in this study also reported their cognitive understanding about the social facts that "problems (mismanagement of SARS) are of multiple components" and "public is in fear of unknown". Data showed a mix of emotional and cognition components that according to Lewis and Ferrari (2001) help to revise the self-organizing systems of self system. Data also showed that interviewees initiated constructive actions of self to bring a better change of world through "I can show my positive perspectives through..."; "I can show people how I can eliminate risks by taking universal precautions" These findings seem to reveal a transition of subjects' nursing conception to actions.

After all, the study confirmed that there was a great impact of the SARS crisis which profoundly enhanced the professional identity of these nursing students. This involves a reorientation of own relations to society; a review of health and life, and a reconstitution of professional identity by nursing students.

From this study, we found respondents getting a stronger sense of nursing identity through evaluation upon the SARS related issues. In addition, the SARS experience had provided a good opportunity for experiential learning. The event exposed students to reflective observations that involve looking back at experience and considering its significance. The findings suggest experiential reflective thinking (Kolb, 2004) around social events such as SARS outbreak could possibly promote a professional identification.

Incorporating SARS experience into nursing curriculum

In Gregg and Magilvy (2001)'s study, participants gained positive influences in professional identification from basic nursing education. Vanhanen and Janhonen (2000), affirmed that education plays a major part in restructuring nursing students' orientations to nursing. According to Schon (1987), the most important aspects of professional education are acquisition of worldviews of that discipline. This involves a change of perspectives of own relationship to that particular discipline. Mezirow (1978) used the term 'perspective transformation' to describe the process of becoming aware of our assumptions about oneself and others. He suggests two paths to perspective transformation: one is a sudden insight; the other is through series of transitions which permits one to revise his/her assumptions about oneself and others.

The SARS outbreak was unique in promoting a sense of belonging and bonding that made nursing students feel a part of the nursing profession. More importantly, the event provoked an instant positive change of perspectives regarding nursing identity. However, tremendous way of change is too much for us; rather, we would like to turn this critical experience into a learning opportunity. We suggest a steady instillation of nursing identity into the minds of nursing students. By incorporating SARS experiences into nursing education curriculum, a sharing session is proposed to be integrated with nursing subjects such as ethics or professional development. This session will introduce students to a rich array of materials related to SARS events, including featured story and reports, thematic video. As life stories provide a great deal of information to students as to how they should view their professional worlds, this session will have nursing professionals' sharing their vivid life experiences with SARS.

Discussion in the session will be focused on in-depth reflection upon SARS issues. For instances, how nurses struggle with and reflect upon their individual or collective experiences in various social and ethical dimensions; how the media at the time portray nursing image; how the paradoxes of nurses being victimized heroes could have happened. We hope that a recapturing and re-evaluating upon the experiences helps learners to articulate what they have learned and gain an understanding of the meaning of being a nurse.

Further, discussion could be focused on the similarities and differences between the Chinese

nurses and their cultures in the Chinese mainland, Taiwan, Hong Kong, and Singapore. From the perspectives of ethnicity, culture, and the adoption of certain moral and altruistic attitudes to life, the complexity of nursing identities could be grasped and internalized.

The proposed session aims not only at the mere sharing of experiences, but training for critical thinking which involves clarification of own values and levels of commitment to the profession and society; and an appreciation of the value of life and health related jobs. Through these simulated experiencing exercises, the link between the learning experience and the reflective activity is hoped to be strengthened, assumptions about the relations of oneself to others revised and a nursing professional worldview frame identified.

Conclusion

SARS outbreak is not merely a time of crisis, but a time for a reconstruction of personal view and worldview for the nursing profession. Through this event, nursing identity was affirmed among nursing students. Making sense of this event and incorporating that into educational activities would promote a process of self-growth and professional identification for nursing students.

References

- Boud, D., Keogh, R., Walker, D., 1985. *Reflection: Turning Experience into Learning*. Kogan Page, London.
- Bruner, J.S., Kalmar, D.A., 1988. Narrative and meta narrative in construction of self. In: Ferrari, M.D., Sternberg, R.J. (Eds.), *Self-Awareness: Its Nature and Development*. Guilford, NY, pp. 308–331.
- Cook, T.H., Gilmer, M.J., Bess, C.J., 2003. Beginning students' definition of nursing: an inductive framework of professional identity. *Journal of Nursing Education* 7, Vol 42 July.
- Crotty, M., 1996. *Phenomenology and Nursing Research*. Churchill Livingstone, Melbourne.
- Fagermoen, M.S., 1997. Professional identity: values embedded in meaningful nursing practice. *Journal of Advanced Nursing* 25, 434–441.
- Glen, S., 1998. The key to quality nursing care: toward a model of personal and professional development. *Nursing Ethics* 5, 95–102.
- Gregg, M.F., Magilvy, J.K., 2001. Professional identity of Japanese nurses: bonding into nursing. *Nursing and Health Sciences* 3, 47–55.
- Health, Welfare and Food Bureau, SARS Bulletin, 23/6/03. Available from <<http://www.info.gov.hk/dh/diseases/ap/eng/bulletin0623e.pdf>>.
- Kolb, D.A., University of Puget Sound Web site at: <<http://www.ups.edu/aca/advman/mbdevl2.htm>>. Accessed April, 2004.

- Law, W., Arthur, D., 2003. What factors of influence Hong Kong school students in their choice of a career in nursing? *International Journal of Nursing Studies* 40, 23–32.
- Lewis, D.L., Ferrari, M., 2001. Cognitive-emotional self-organization in personality development and personal identity. In: Bosma, Harke A., Saskia Kunnen, E. (Eds.), *Identity and Emotion – Development through Self-organization*. Cambridge, UK.
- Magai, C., Nusbaum, B., 1996. Personality change in adulthood: dynamic systems, emotions, and the transformed self. In: Magai, C., McFadden, S.H. (Eds.), *Handbook of Emotion, Adult Development, and Aging*. Academic, San Diego, pp. 403–420.
- Mezirow, J., 1978. *Education for Perspective Transformation: Women's Reentry Programs in Community Colleges*. Centre for Adult Education, Columbia University, NY.
- Miles, M.B., Huberman, A.M., 1994. *Qualitative Data Analysis*, second ed. Sage, CA.
- Mingpao (Hong Kong Newspaper) dated 24/4/03.
- Ohlen, J., Segesten, K., 1998. The professional identity of the nurse: concept analysis and development. *Journal of Advanced Nursing* 28, 720–727.
- Oriental daily (Hong Kong Newspaper) dated 24/6/03.
- Schon, Donald A., 1987. *Educating the Reflective Practitioner: Toward a New Design in Teaching and Learning in the Professions*. Jossey-Bass, San Francisco, Calif.
- Seamon, J.G., Kenrick, D.T., 1987. *Psychology*, second ed. Prentice-Hall, NJ.
- Spouse, J., 2000. An impossible dream? Images of nursing held by pre-registration students and their effect on sustaining motivation to become nurses. *Journal of Advanced Nursing* 32, 730–739.
- Vanhanen, L., Janhonen, S., 2000. Changes in students' orientations to nursing during nursing education. *Nurse Education Today* 20, 654–661.

Available online at www.sciencedirect.com

