

## SARS: caring for patients in Hong Kong

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**SARS: caring for patients in Hong Kong**

**Aim and objective.** To explore in depth the experiences of nurses' caring for SARS patients in Hong Kong.

**Background.** Severe Acute Respiratory Syndrome (SARS) dramatically demonstrates the global havoc that can be wreaked by a newly emerging infectious disease. The current literature either has a predominantly biomedical focus or deals with the psychological impact on healthcare workers. Published studies on the lived experience of nurses caring for SARS patients are currently lacking.

**Design.** A phenomenological design.

**Methods.** Using methods consistent with Husserl's philosophy, eight Registered Nurses working in three regional hospitals in Hong Kong were invited to participate in sharing their lived experience of caring for SARS patients and data were analysed using Colaizzi's approach.

**Results.** The three major themes explicated were: the various emotions experienced in caring for SARS patients, the concept of uncertainty and revisiting the 'taken for granted' features of nursing.

**Conclusion.** These themes, when taken together, describe the essence of the voyage undertaken by nurses who cared for SARS patients during the outbreak. The findings of this study indicate that extensive and ongoing support is needed to prepare and enable nurses to care for SARS patients during a crisis and make it easier for nurses to deal with the various uncertainties.

**Relevance to clinical practice.** The essence of caring for SARS patients is highlighted in this study. The experience of caring for SARS patients prompts nurses to find meaning in their experience(s), and to develop knowledge and attitudes on how best to care for patients and prepare for a new crisis in the future. This paper considers a more in-depth understanding of the lived experience of nurses during the crisis and the relevance of this perspective for education and support of nurses.

**Key words:** caring, Hong Kong, lived experience, myriad of emotions, SARS, uncertainty

## Introduction

Severe Acute Respiratory Syndrome (SARS) is a newly recognized clinical disease that has become a major threat to global public health. The index patient who had a probable case of SARS in Hong Kong was admitted to hospital on 21 February 2003. A large outbreak in one regional hospital in mid March 2003 was traced to that patient.

By 27 June 2003, 1755 cases had been reported, with 299 deaths. The sudden emergence of SARS was particularly upsetting for healthcare workers. The spread of the disease, the unknown cause and the precautions taken to protect the health of the public, patients and healthcare workers can be frightening and disruptive. SARS dramatically demonstrates the global havoc that can be wreaked by a newly emerging infectious disease. At this moment, public health authorities, doctors, nurses, microbiologists, scientists and laboratory staff around the world are struggling to contain, cope with and treat SARS. However, to date, research concerning the evolution of the disease, the lessons learned from this outbreak and so forth (Avendano *et al.* 2003, Fang 2004, Hynes-Gay *et al.* 2003, Masur *et al.* 2003, Maunder *et al.* 2003, Ofner 2003) are predominantly located in the medical literature. The nursing literature focuses primarily on the psychological issues such as the anxiety level and the psychological impact on healthcare workers during and after the SARS crisis (Chua 2004, Mak *et al.* 2004). Consequently, such literature does not readily inform us about the intricacies of nursing practice with regard to this sudden and unexpected crisis. However, remarkably little is known about the lived experience of nurses caring for SARS patients. Thus, this study is timely. The central question guiding the study is: what was it like to be a nurse taking care of SARS patients during the outbreak in Hong Kong?

## The study

This study describes the lived experience of eight Registered Nurses aged between 21 and 40 who cared for SARS patients in three regional hospitals in Hong Kong (Table 1). The phenomenological approach underpinned by the philosophy of Edmund Husserl was chosen to guide this study because this approach has its philosophical roots in the phenomenological perspective (Patton 2002). Under this approach, the subjective, experiential accounts of nurses presents a faithful description of the nurses' experiences in caring for the SARS patients that other nurses who lived through the experience

would immediately recognize (Sandelowski 1986). Ashworth (1997) considers such experiences as the 'participants' truth'. What the informants experienced constitutes a source of knowledge to be discovered by others who may wish to develop an understanding of these experiences in the aftermath of the SARS outbreak.

As a research method, the principal researcher tried to 'bracket out' lived experiences of caring for SARS patients before turning to pure consciousness of the phenomenon (Patton 2002). No literature review was carried out before the data were collected. Every effort was made to suspend discussion of the study with colleagues and friends. Throughout the study, the researcher deliberately pushed reflective, intruding thoughts and self-opinions out of her mind. Furthermore, reflective writing was used as a means of 'refreshing' her mind prior to talking to each participant, as well as analysing each participant's text. These strategies enhanced the scientific rigour of the study (Corben 1999).

## The participants

Following the outbreak in the community in late March 2003, the number of people admitted to the regional hospitals with SARS increased exponentially. The manpower in these admitting hospitals was redeployed to boost the manpower of the SARS wards. Six nurses were initially recruited who were part of the first batch of nurses deployed to work in the SARS wards, and they were recruited at convenience as the principal researcher was their ex-teacher. This kind of close researcher-participant relationship enhances the truth and credibility of a qualitative study (Sandelowski 1986). The participants were thus able to relate easily to the researcher and a sense of trust between participants and the researcher

**Table 1** Demographic data of the eight participants working in SARS wards during the outbreak

Nurse (pseudonym)	Sex	Age	Regional hospital	Years of clinical experience	Basic nursing education
Leung	M	22	A	1.5	Higher Diploma
Lee	F	24	A	3	Baccalaureate
Bee	F	21	B	0.5	Higher Diploma
Fung	M	21	C	0.5	Higher Diploma
King	M	21	C	0.5	Higher Diploma
Yee	F	40	B	14	Diploma
Hang	M	21	C	0.5	Higher Diploma
Wan	F	36	B	10	Diploma

underpinned the entire interview process. Depending on the nature of the data collected in the early stages and to capture the whole picture of caring for SARS patients, two more nurses with more than 10 years of experience working in intensive care units were recruited. This strategy of recruiting participants will encapsulate the experience of all participants representing that specified group, being a 'slice from their life world' (Denzin 1983, p. 134).

### Data collection and analysis

The participants provided oral and written consent to be included in the study, which was approved by a university ethics committee. Confidentiality was maintained by replacing the names of the participants with pseudonyms. Separate interviews with the eight participants occurred in a private office or room, each lasting approximately 1–2 hours at mutually acceptable dates and times. The term 'conversation' rather than 'interview' was a more appropriate description of the actual process (Bergum 1991). This 'conversation' included not only a description of the experience, but also the nurses' reflections of their own descriptions. A focused but non-structured 'talking' technique was used. An opening request of 'Could you please describe what it is like to care for SARS patients?' was used, and no pre-set questions guided the conversation. Probes and nudging (Minichiello *et al.* 1995) were used to encourage participants to explore further their thoughts, feelings, concerns and worries during the outbreak. Further questions were asked, such as 'Can you tell me more about that?' After each interview, the proceedings were transcribed verbatim into a word processor. The transcripts were then subsequently printed for further manual analysis.

Data analysis involved adhering to Colaizzi's (1978) approach consisting of six overlapping steps that should be viewed flexibly and freely by each researcher. The researcher in this study follows Sandelowski's (1993) strategy of appreciating the art of delving into the human experience rather than adhering to a strict research design that may stifle creativity, reflectivity and imagination. With reference to Beck's (1993) criteria to evaluate the credibility, fittingness and audibility of qualitative research, these guidelines were used to achieve a high level of rigour in this study. The transcripts of the interview were read several times while listening to the tape recordings. This primary analysis promoted an early understanding of the descriptions as a whole and a broad analysis of meaning. Listening intently is an essential element of analysing tape-recorded data (Too 1996). During this continuous reading of individual transcripts, salient words, statements and formulating meanings were extracted. For example, when a

nurse spoke of his/her emotions, the phase 'What could I do?' was extracted. The formulated meanings were then arranged into clusters of themes, which merged into an exhaustive description of the phenomenon. The exhaustive descriptions were reduced until the essence of the phenomenon emerged; for example, the sense of powerlessness in the myriad of emotions. The final stage involved returning to the participants to obtain their views and verify meanings. In accordance with Colaizzi's (1978) work, the researcher continually returned to the interview transcript to validate findings at each stage. To achieve credibility, group discussions between novice and experienced nurses were conducted after all of the individual interviews had been completed. During the group interviews, the nurses were encouraged to share detailed narratives of their experiences in caring for SARS patients. This strategy could triangulate across the data sources to determine the congruence of findings among them and serve to validate the findings (Guba & Lincoln 1981).

### Findings and discussion

After extensive analysis and reflection, three major themes emerged from this study. These themes are described and illuminated by narrative comments from the participants in this discussion. A discussion of the findings follows the presentation of each theme, as it is asserted that integrating the findings and the discussion is an appropriate method for encapsulating the essence of the phenomenon under investigation.

#### Theme 1: A myriad of emotions in caring for SARS patients

Participants described a variety of emotions recalled from their experiences of caring for SARS patients. The nurses frequently mentioned experiencing feelings of powerlessness, stress, unfamiliarity, frustration, vulnerability, threat and empathy when describing how they had felt in this 'battlefield'. The sense of powerlessness was described by participants as a core element of feeling, because what they were facing was unknown and they were unable to help their patients in a competent manner. One nurse stated:

Frontline healthcare professionals, for example, doctors, nurses and support staff were under extreme pressure both physically and psychologically, as SARS was not something that we had come across before. SARS has broken the boundaries of specialties as it could affect anyone, and it did so rapidly. What could I do? How could we stop the spread? (Bee)

There were times I thought about quitting. I resented being chosen for the task. Why me? I was unable to take care of myself in this stressful working environment. How could I help my patients? I was powerless. (Fung)

Linked closely with the sense of powerlessness was the feeling of unfamiliarity. The causes of the unfamiliar context for care included: the use of negative pressure isolation rooms, N95 masks or a higher level of respiratory protection, gloves, gowns, eye protection, Barrierman suits and careful hand hygiene:

One challenge we had to get over was the personal protective equipment (PPE), in particular, the N95 mask. Wearing it was a nightmare. The mask was meant to be tightly fitted on the face for maximum protection. Initially, I had a headache after having it on for a short while. (Fung)

The participants described feelings of frustration when nurses did not follow the infection control guidelines properly. Some of their quotes captured these emotions:

We were happy to care for the patient, but other colleagues were worried about the consequences. Managing junior and other supporting staff in this situation was problematic and frustrating. Some were thinking of what effect it would have on their families, so keeping them informed with up-to-date information was crucial. It was important to tell the truth, to reassure them and to let them know that they could count on you. (Yee)

It was hard to work with those colleagues who were not prepared to be assigned to work in SARS wards by denying the risk or by simply being rebellious. These efforts were complicated by their incomplete knowledge about the actual risks.... They believed whatever they heard from the media, other colleagues and friends. I was frustrated when staff was observed to be not fully complying with infection control procedures. (Wan)

The regional hospitals that had been receiving SARS patients were under tremendous strain. There was also a sudden rise in demand for both professional skills and protective materials to achieve stringent control over infections. Inadequate capacity in hospitals and public health systems was a major problem during the outbreak of SARS, especially as healthcare workers were themselves falling victim to the disease, being the frontline staff at risk. Healthcare workers felt threatened; they naturally had a great fear of catching this fatal infection. The sense of threat is best illustrated in the words of some nurses:

I have seen my colleagues stricken with this disease. Whether my colleagues were infected while taking proper precautions or whether they were inadvertently infected when the risk of exposure was not apparent was the last thing on my mind. Am I going to be next? (Bee)

...It is just the global newness. My colleagues have been victims of the disease. SARS posed a heavy burden on my ward. Being a senior staff of the ward, I faced the emotional challenge of balancing my responsibilities to ensure optimal care for patients with SARS while ensuring the safety and well-being of my junior nurses. (Yee)

All of the participants described being particularly vulnerable when caring for patients who were healthcare workers, whether doctors, nurses or support staff who had contracted the disease at work. That the patients were colleagues in a similar situation in life gave a more personally emotive dimension of the experience. The nurses put themselves in the place of the patients, as described by the following participant:

...because we've had a lot of colleagues who have caught the disease at work recently... I often think what their feelings were when they were told that they were infected. What would happen if I were the one suffering from SARS? (King)

The nurses also felt empathy as they got to know their patients. As one nurse expressed:

I tried to imagine what she was going through. She was well all during the last few days. But I remembered I was in the afternoon shift, and after she returned from washroom, she was breathless, so anxious for air. She looked towards me, beckoning me for help. She asked if she was going to die. She said she didn't know how to breathe.... I knew this woman feared suffocating. As she became more anxious she tried to breathe harder, which made her even more anxious. (Yee)

The viral load is proving to be a contributing factor in the infectivity. We were told to avoid prolonged exposure and shorten the time we spend with the patients. Surprisingly, I got to know them better. I just empathize with a patient and try to put myself in his or her shoes or try to think of how I would feel if it were one of my friends. (Bee)

In this description, empathy and identification with the patient's situation occurred even in the absence of an established nurse-patient relationship. The participants' descriptions of feeling vulnerable heightened the participants' awareness of their own risk. Thus, the participants' descriptions of placing themselves in the patients' position for a few seconds exposed the very profound 'personal' dimension in the nurse-patient relationship highlighted by Field (1992).

## Theme 2: Concept of uncertainty

The naivety, uncertainty and lack of knowledge displayed by these participants when caring for SARS patients were the somewhat unique difficulties that nurses faced when caring

for patients with this newly recognized disease. Being uncertain is a major theme in the nurses' description of the essence of their experiences. The existing literature on uncertainty shows that it is a common theme for those living with chronic illness, such as for survivors of cancer. There appears to be a lack of information about the lived experience of nurses in the face of crises. Caring for patients with this newly recognized clinical disease that has broken out worldwide is a new phenomenon:

This poorly understood new infectious disease had the power to incite widespread public and personal anxiety. ...The fear of SARS has spread faster than the virus in the initial phase of the outbreak. (Wan)

At the start there were lots of rumours flying around the hospital: the causative agent was not well understood, a diagnostic test had not yet been developed, the mode of transmission was not well understood, no treatment regimen had been established, no immunization existed and patients were dying. ...We did not know how SARS was being spread at first, nor how infectious it was. (Fung)

Because the disease was so new, information continued to change... modification and updating of the infection control procedures and recommendations day by day, and even hour by hour, increased frustration and uncertainty. The perception of personal danger was exacerbated by this uncertainty. (Hang)

Everything was unknown and unknowable. I guess I didn't know much more than my patients.... (Leung)

Bottorff *et al.* (1995) claimed that, as nurses are in continuous and close interaction with patients and family members, patients should be able to approach nurses with questions and nurses should be in an ideal position to help the patients and family members cope with the crisis. Nevertheless, the participants in this study described themselves as adversely affected by the sudden upsurge in this disease, being in fear of contagion and of infecting family, friends, colleagues and so forth. As a result, the nurses spoke as if they were travelling with the SARS patients on a voyage of uncertainty.

Mishel (1990) has depicted uncertainty as occurring in a situation in which an event or a disease cannot be adequately defined or categorized, or the outcome adequately predicted. In the phenomenon of caring for SARS patients, uncertainty was present throughout the diagnosis, treatment, prognosis, search for the mode of transmission and discussions over the issue of how infectious the disease was. These situations are complex and include unpredictable, unfamiliar, inconsistent and little information on how to treat and cope with this new deadly disease:

As a novice, I was lost when rumours began to spread. I didn't know what and who to follow in the initial phase of the outbreak: the news

from media, colleagues or the hospital's protocols and guidelines, etc. I had to read piles of updated infection control procedures at the start of a shift or even within one shift of duty. I performed minute-by-minute checks of information published online, for example by the World Health Organization, after work.... I needed reassurance and a mentor to tell me what to do. To be honest, I was over-vigilant about SARS at that time. (Lee)

I was frustrated in the first few days as everyone was masked and gowned. We hardly had any idea who they were, nurses, doctors or patients, unless the patients were staying in their beds. I was uncertain about the level of protectiveness of PPE.... But one day I realized that everyone had become prettier. I guessed this might be because only their eyes could be seen. I could see the words of the patients through their eyes. (Bee)

The participants' description of uncertainty affirms the recent work of Mishel (1997), who stated that uncertainty is a neutral cognitive state and can be either positive or negative. Our nurses described uncertainty as a source of emotional distress, but also as an opportunity for the novice to grow. The experience gave them a deeper appreciation of what nursing is, a greater awareness of and alertness to this new disease and helped them to develop confidence. It affirms the statement of Babrow *et al.* (1998, p. 9) that 'Uncertainty can be a door to hope, an opportunity or challenge, or a threat.'

### Theme 3: Revisiting the 'taken for granted' features of nursing

The essentially negative feelings associated with emotional turmoil in the initial phase of the outbreak contrasted sharply with how nurses experienced the contextual and humanistic meaning of nurses' role in this theme. All reckoned that it was an unforgettable experience, as they knew that they could contact a potentially deadly disease while trying to save their colleagues and others. Their intention to fight for their own lives and those of others enabled the nurses to be with their clients and their sick colleagues and made them more determined to come out and take up the challenge of caring for the SARS patients.

#### Committed to nursing

This subtheme of self-motivation and commitment to take up the challenge in a team comes through clearly in the quotes of our participants:

If I don't catch the disease and fall sick, I could still go to work the next day. I have saved one life already. Although I felt like I was working in a 'battlefield' at the beginning, we worked as a team. The ward had

friendly, approachable nurses who did not impose unnecessary restrictions on patients. We appeared to have 'all the time in the world' for patients and gave the impression that nothing was too much trouble. A non-hierarchical team spirit existed among staff of all grades, generating collegiality and a willingness to work together. (Lee)

### Being sensitive and present

Patients suspected of having SARS presented symptoms that ranged widely in severity from breathlessness to a relatively mild dyspnoea with fever, headache and myalgia. Generally, more psychosocial support was required by patients in SARS wards who had mild to moderate symptoms:

Being a caring nurse means being sensitive to other people's needs, and trying to meet those needs as best as I can. As in-patients were isolated and no family visits were allowed, most expressed sadness about missing their families at home and complained of boredom and loneliness. The simple presence of a person with the time and willingness to be with them was identified as most valuable, especially for patients with SARS who were 'doing well' and thus receiving less nursing contact. (Wan)

I feel that it's just as important to be there with my sick colleagues... so that they know that there is somebody who is 'familiar with' them there and they're not just left on their own.... (King)

### The little things that count

Most of the nurses uncovered the dimensions of nurses' role in a richer and contextualized way. They visualized the significance of 'the little things that count' in making a difference to the patients' perceptions of being cared for:

Patients with SARS reported feelings of fear and loneliness, and worried about the effects of quarantine and contagion on family and friends. Outside communication was only available to the patients by mobile phone. I didn't realize that simply having a chance to talk to family members was so important until I handed the wireless phone to an old patient aged 75 to talk to his wife... it was unbelievable how his oxygen saturation improved afterwards. (Fung)

Although the emphasis was on the delivery of holistic care, medical diagnoses and treatment plans were the focus of my care. But, now, shortly after their admission, all of the people the SARS patients had been in recent contact with, including their family members need to be quarantined. This resulted in feelings of guilt and fear for the welfare of friends and family.... It suddenly drew my attention to the fact that caring for patients not only involves doing things that they do not have the knowledge to do for themselves, for example, changing a dressing; it also involves doing things that they cannot do for themselves; for example buying a newspaper in the morning. In

the past, I would not bother with these 'little' things, as the patient or the family would do it. (Bee).

Caring for SARS patients is not necessarily a physical thing, I would ask if any patients in my cubicle would like to have some toiletries or hot food in the canteen.... I think when I'm really caring the most for a patient is when I go above and beyond just the routine. (King)

### Family care

Family members at home found it difficult because they could not give direct support to their sick relatives by visiting. Caring for SARS patients should include the family. Anticipating the needs of the family is important. Most of the nurses exhibited concern for the welfare of the patient and their family members:

Helping family members to know and understand the outcomes of the patients was my routine. A system of daily progress reports by telephone was implemented. (Bee)

Family members could receive information on the patient every day even when they were unable to visit. I showed care by being reassuring. I think that the physical and emotional presence of the nurses over the phone in times of crisis is important to family members because it demonstrates that someone cares about them and their relatives. (Yee)

### Providing information

The patient expected nurses to be a source of information on his/her disease, progress and medical treatment. However, owing to the crisis nature of SARS, there was no time for patients, families and healthcare workers to prepare. The stress arising from such a situation usually made all of the parties involved feel disorganized and helpless. As a result, nurses were perceived to be in a better position to contribute information about the patients, understand their condition, care, treatment and likely progress, and to be sensitive in delivering the right amount of information, pitched at the right level and at the right time:

The stress arising from such crisis usually makes patients feel helpless, the ability of the patients to comprehend and process information may also be impaired. Information should therefore be provided in simple and non-technical terms. An adequate knowledge base and communication skills are necessary. (Yee)

### Reciprocity

The following quotes are a composite description of an emotional and spiritual exchange between the patients and

the nurses, with the patients enriching the lives of the nurses. These were some gifts received along the way that could not be explained. For example:

In the beginning, caring for doctors and senior nurses increased my discomfort and anxiety regarding my competence and skills. My hands shook when injecting the ribavirin. Some of them said, 'Oh, you've done a good job.' Just a simple 'thank you' from these patients was enough.... I know they have recognized that I handled that okay. (Lee)

One patient said, 'Thanks for taking care of me.... I know that you all did so much for me. I could remember your voice even when you had a mask on.' That gave me such a warm feeling because I saw that this patient was improving. (Wan)

## Conclusion and implication

The emergence of SARS was a severe blow to the healthcare sector in Hong Kong and had devastating consequences for its economy. However, the crisis brought nurses closer together than they had ever been. This study sheds light on the essence of the experience of caring for SARS patients, about which we had no prior experience but now recognize as a new phenomenon. Caring for SARS patients was a complex mesh of feelings and interrelated experiences, some of which appeared to overlap with each other in some ways and to change over time. Initially, emotional turmoil was experienced by the participants, who unanimously described this as the low point in their new experience. The voyage of uncertainty occurred without warning, and there was no time for patients, their families and even the healthcare workers to prepare. The uncertainty, naivety and lack of knowledge displayed by the participants were considered unique difficulties that nurses faced in caring for patients with this new disease. It was unrealistic to expect unprepared nurses to care for and cope with SARS patients without instruction and appropriate training. There is a need for leadership in uncertain times.

The nursing role for SARS patients was complex and multi-dimensional. It involved not only behavioural tasks, which were only one facet of the process, but the tasks of assessing and addressing the unique needs of the patients and their families, with the goal of improving the patient's condition. It also involved an acknowledgement by the nurses that they were actually emotionally involved in the process of caring. The growth of the nurse-patient relationship fostered a sharing by the nurse of the patient's distress. This shared suffering can devitalize the nurse or it can enrich and enhance the nurse by awakening feelings of compassion and empathy. Caring is meeting the needs of the patient and nurses.

Participant nurses who become consciously aware of their own feelings as part of caring enhance the mutual understanding between the patient and nurses, which is useful in determining needed nursing actions. When nurses are alert to the feelings and expectations of their patients, this prompts nurses to become aware of their own health and personal development and to support a caring way of being and living. In the process of caring for SARS patients, nurses recognized that they were experiencing a deeper dimension of caring, and worked towards understanding and creating the conditions whereby caring beliefs could be realized. These shared experiences and meanings sustain nurses as they went through the voyage of crisis, which served as a wake-up call for nurses of the need to re-evaluate their concept of self, their motivation, their sense of being present with and for others, the roles and features of nursing and the ability to be aware of the situations of others. These developments have made the nurses more receptive to understand the lived world of others.

One limitation to this research is that descriptions were given by the front line nurses, but none by the nursing leaders. There is a need for further research that includes the collection of data from the management level of the regional hospitals when examining how the epidemic was handled and determining how best to prepare for the future.

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## Contributions

Study design: BPMC, ESBS; data analysis: BPMC, TKSW, ESBS, JWYC; manuscript preparation: BPMC, TKSW, ESBS.

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