Résumé

Les conséquences d’une crise sanitaire nationale :
une exploration qualitative de l’expérience des infirmières communautaires face au SRAS

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Nous avons mené cette étude dans le but d’approfondir notre compréhension de l’effet provoqué par la crise du SRAS sur le travail et la vie personnelle des infirmières communautaires. Afin de connaître leurs perceptions à ce sujet, nous avons sondé 941 infirmières communautaires employées dans différents services de santé de la province de l’Ontario au Canada. Les données qualitatives recueillies ont été organisées en thémes et sous-thèmes selon deux catégories : L’expérience en tant que telle (récits sur les opérations, l’organisation de l’intervention et le vécu personnel) et Les leçons tirées de l’expérience (occasions d’apprentissage personnel, de formation professionnelle, d’élaboration des politiques et réflexion sur les enjeux politiques et administratifs). Les résultats sont analysés sous l’angle des enseignements suscités par la crise à l’échelle locale, nationale et internationale. Le rôle de facteurs comme l’efficacité de la communication, la coordination des interventions d’urgence et la formation sont examinés à la lumière des politiques et des réactions administratives face au protocole à observer en cas de maladie infectieuse. Une réflexion d’une grande pertinence en ces temps où la crainte de nouvelles pandémies refait surface.

Mots clés : SRAS, infirmières communautaires, maladie infectieuse
Diverse Implications of a National Health Crisis: A Qualitative Exploration of Community Nurses’ SARS Experiences

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The purpose of this study was to enhance our understanding of the influence of the SARS crisis on the work and personal lives of community nurses. A total of 941 community nurses employed in a range of health-care settings in the province of Ontario, Canada, provided qualitative information about their perceptions of the impact of SARS in their workplace and in their personal lives. Themes and subthemes from the data were organized into 2 categories: The Experience (operational, organizational, and personal narratives), and Learning from the Experience (opportunities for personal learning, professional and policy development, and insight into policy and administrative implications). The findings are discussed within a framework of the learning opportunity presented by the crisis at the local, national, and international levels. The roles of effective communication, emergency response coordination, and education are considered with respect to policy development and administrative responses to infectious disease protocol. The findings are particularly relevant at this time of heightened fear of global epidemics.

Keywords: SARS, community nursing, infectious diseases, qualitative methodology

Headlines warning of potential threats to public health dot the landscape of local, national, and international media. Effective emergency response is essential, especially in light of the continuing threat of new epidemics such as avian flu. The outbreak of SARS (severe acute respiratory syndrome) presented an opportunity for Canadians to examine our practices, policies, and procedures at both the local and the provincial level. Apart from the Asian Pacific region, Canada was the country most severely impacted by SARS (Gottlieb, Shamian, & Chan, 2004). The experience not only tested the capacities of many distinct sectors of health-care provision (Emanuel, 2003) but also challenged Canada’s entire health-care system (Bernstein, 2003). Review of this experience and identification of systemic strengths and weaknesses can guide us in
preparing for future epidemics and other demands on our health-care system (Wenzel & Edmond, 2003).

In this article we report on a study conducted to explore the effect of the SARS experience on the lives of community nurses in the province of Ontario and to offer suggestions for how this information may be used to enhance our public health system.

In Canada, SARS was first reported in March of 2003 (McGillis-Hall et al., 2003). In May of 2003 it was estimated that health-care workers constituted an alarming 65% of the probable cases of SARS in Canada (Emanuel, 2003). Nurses are in contact with patients for longer periods than any other group of health-care providers (Chan, 2003) and therefore are disproportionately exposed to factors that can affect their health and well-being. This close and extended contact places nurses at the greatest risk among health-care workers for exposure to infectious diseases.

The uncertain nature of SARS and the speed at which it spread produced stressful environments and required constantly evolving health practices (Maunder, 2003). The media attention on the outbreak led to a stigmatizing of health-care workers (McBride, 2003). Health-care workers were quarantined, scrutinized, and shunned within the community, compounding their own anxiety about the threat of SARS (Fletcher, 2003). Psychological reactions to SARS ranged from fear, anxiety, and frustration (Maunder et al., 2003) to psychological trauma (Hurst, 2003). However, despite the personal risk associated with providing health care, nurses continued to tend their patients (Chan, 2003). The Registered Nurses Association of Ontario has lobbied for systematic evaluation of the effect of SARS on the nursing profession and on nurses working in Ontario (Falk-Rafael, 2003).

In examining the personal experiences of acute-care nurses with the crisis in the workplace, Mavromichalis (2003) found stress, fear, uneasiness about the unknown nature of SARS, and shunning by the community. Overall, the author concludes, it was a sense of community and teamwork, a supportive workplace, and the ability to rely on each other that got the nurses through the crisis. Similarly, themes of fear — primarily fear of contracting or transmitting SARS — stress, and exhaustion emerged in Jonas-Simpson’s (2003) interviews with nurses who cared for probable SARS patients at Sunnybrook and Women’s College and Health Sciences Centre in Toronto. A co-worker’s diagnosis of probable SARS was a source of distress that often led to feelings of devastation and shock. Many respondents in the Jonas-Simpson study used war analogies to describe their experiences with the outbreak. The author reports that support and understanding of colleagues were the most commonly cited factors that helped the nurses to cope during the
outbreak, with involvement of managerial staff and open communication being crucial to the perceived sense of support.

In a study with 2,001 employees (26% of whom were nurses) of Sunnybrook and Women’s College and Health Sciences Centre, Nickell and colleagues (2004) found that nurses were most concerned with their own health and reported significantly higher levels of emotional distress than employees in other occupations. However, nurses also cited positive outcomes of the SARS crisis. These included increased awareness of disease control, a sense of cohesion among staff members, and learning opportunities provided by the SARS experience.

Finally, in a study with staff members in a teaching hospital affected by SARS, Maunder and colleagues (2003) found a fear of contagion among both staff and patients, with personnel reporting health-related anxieties and concerns similar to those of quarantined patients; the discouraging of staff members from interacting with the public at a time of dire need for emotional support and reassurance intensified the negative emotional experience.

Although information on the experiences of hospital nurses contributes to our understanding of the effects of SARS, it is also imperative that we broaden our scope beyond the hospital setting, to address future outbreaks more comprehensively (Sim & Chua, 2004). Nurses in community settings such as public health and home care were also affected by this health emergency, and their experiences may differ from those of nurses employed in acute-care settings. Through this qualitative analysis of the impact of the SARS outbreak on the professional and personal lives of community nurses, we were able to uncover perceptions that otherwise may not have been recorded given the novelty of this type of threat. The non-financial costs of the SARS outbreak for health-care workers have not been adequately explored (McGillis-Hall et al., 2003). The present study serves to narrow this gap in the literature and may help us to better understand the diverse implications of a national health crisis.

Method

Ethics approval for the study was obtained from the University of Windsor Research Ethics Board. The questionnaire, part of a larger survey examining workplace factors affecting retention of community nurses, asked participants about the impact of SARS in their workplace and in their personal lives. Specifically, in a two-part open-ended question, respondents were asked, “How would you describe (a) the impact of SARS in your current workplace, and (b) its effect on you personally.”
Questionnaires were mailed to 3,000 community nurses randomly selected from the Registered Nurse database of the Ontario College of Nurses. A total of 1,519 questionnaires were returned, for a response rate of 50.6%. Of those, 999 (65.2%) included the SARS information sheet (941 of these were useable, with the remaining 58 being returned incomplete or illegible). All written responses were included in the analyses. For work settings, 898 respondents provided information; settings included public health (n = 290), home care (n = 280), Community Care Access Centres (n = 197), nurse practitioner (n = 15), and “other” (i.e., clinics) (n = 116).

All responses to the SARS items were transcribed and imported into N6 (QSR, 2002), a computer program for qualitative research analysis, and a thematic analysis was conducted. Text units with shared meaning or expressing similar sentiments were grouped and major themes were identified, sorted, and coded using open and axial coding. Further analysis and coding resulted in the identification of subthemes. Comments that referred to more than one category were coded under all relevant categories. Response prevalence was also noted.

Results

The nurses’ comments fell into two overarching categories: those referring to some aspect of the experience of SARS (The Experience), and those reflecting what might be learned from the experience (Learning from the Experience). Under each of these categories, three broad themes were identified. The Experience category comprised operational, organizational, and personal dimensions. Learning from the Experience included learning opportunities, professional development opportunities, and opportunities for gaining insight into policy and administrative implications.

The Experience

Operational dimensions of nurses’ SARS experience related to the work of community nurses and represented a number of workplace challenges. Workload issues represented by far the most commonly reported impact of SARS, with 66% of respondents citing increased hours and weekend shifts, increased paperwork, staff shortages, program stoppages, and additional work relating to patient and visitor screening and the mandatory use of gowns and masks. Some nurses felt that they were “drowning in paper” and that disruption of program delivery negatively affected their relationships with partners and clients as well as workplace morale.

Some respondents focused on the long hours and uncertain, anxiety-provoking working conditions. “I became very moody and irritable,”
wrote one nurse. “Neglected my family due to stress. It was a nightmare.” Others expressed dissatisfaction with the expectation that they work extended hours and a belief that their employers had taken advantage of them. Screening and precautionary procedures instituted in response to the crisis created unique problems for community nurses: “We were asked to gown, glove and goggle and mask for every client. That’s a joke! Maintaining isolation protocol going from car to house — back to car, client to client, is impossible.”

In addition to the anticipated consequences of a disease outbreak, including the threat to public health, the redirection of health-care resources to meet the demands of SARS also resulted in difficulties with other health-related issues. Expanding on the effects of short-staffing, one nurse wrote, “Personally, [I feel] vindicated. [I] have been ‘preaching’ for many years that [having only] skeleton infectious diseases staff in hospital, public health etc. spells disaster.”

Increased levels of stress were frequently associated with workload issues. Changing directives, a perceived lack of direction, and a shortage of staff and resources took a toll on nurses and their families: “Every one of us has made personal sacrifices…in terms of time, physical, mental, and emotional energy.”

An operational aspect identified in 13% of the comments related to nurses’ interactions with members of the public. The nurses not only had to deal with anxious and frustrated clients, but felt that they were at the mercy of the honesty of their clientele. Some participants had difficulty trusting clients to answer screening questions honestly and to abide by quarantine rules. The effect of visitor restrictions on clients’ well-being was also a concern, as illustrated by the comment of one frustrated nurse: “Money talks even during SARS. If my office patients could be screened by the hospital surely family members…[of] long term care patients could have been as well.” Participants also described their feelings about the role of the public in responding to and complying with SARS-related directives:

My experience in the workplace regarding lack of compliance from clients in quarantine orders also makes me angry and afraid. I feel that even after all the work of ALL health care professionals, this issue may be impossible to be contained without support of public.

Finally, some community nurses reported feeling isolated from friends, family, and the public and receiving negative comments stemming from people’s fear of contracting SARS. Home-care clients refused visits from nurses because of the threat of exposure, people in nurses’ social networks withdrew invitations to social events, and clients made remarks about the threat of catching SARS directly from nurses.
Together these experiences offer some insight into the impact of the SARS crisis on the daily work and personal lives of community nurses. 

**Organizational dimensions of nurses’ SARS experience** were cited less frequently (21%) than operational dimensions or factors relating to the work itself as opposed to the work environment. Organizational dimensions included those related to the dynamics and culture of the work environment. Although negative organizational experiences outweighed the positive at a rate of approximately 3 to 1 (17% vs. 5%), it may be that respondents found only negative experiences worthy of mention. Experiences that were directly related to the organizational environment were leadership, communication, resource allocation, professional recognition, and feeling supported.

The nurses felt organizationally supported when management considered their safety concerns and provided them with options if clients or situations made them feel unsafe. The nurses relied on their superiors to institute regulatory response initiatives to protect them from SARS. One nurse wrote, “We were kept informed as Ministry information and directives were available. SARS kits and necessary instructions on wearing of protective equipment [were] readily available.” However, many nurses contrasted information provided by their superiors with inconsistent messages, ineffective communication, and a lack of consensus in the identification of priorities, causing concern about miscommunication and a lack of organizational support, as illustrated in the comments of a home-care nurse:

> I felt like my agency was putting my life in danger and could not care less about it…. I will never forget the day I was threatened by my supervisor as long as I live. It completely convinced me that my agency is only interested in the contract and not my health and safety.

The respondents described instances of both adequate and inadequate provision of proper protective gear to nurses and, in some cases, to clients. Failure to provide necessary resources in a timely manner had implications for public health:

> One of the most frustrating and frightening aspects of the SARS outbreak was the fiasco regarding the delivery of masks for people in quarantine. They depended on volunteers to deliver them and they didn’t get there for days after their quarantine was over and many of the clients were angry (rightfully so) that they had possibly put their family members’ health in jeopardy.

The final topic encompassed by the organizational dimensions of the impact of SARS was professional recognition. Some respondents felt that their contributions were valued and recognized in both tangible and
intangible ways. Many nurses highlighted the latter, indicating that the SARS experience was a positive one, with people pulling together and the health department playing a visible role. Others, however, wrote that they felt unappreciated, that their personal sacrifices and risks went unacknowledged. Some respondents reflected on the implications of their experience for the nursing profession, expressing a need for action to address systemic health-care issues and policies:

*The SARS epidemic changed my view of nursing in Ontario. I finally realized that nurses were undervalued, underappreciated and undercompensated for the risks they take on daily to provide adequate healthcare to their clients. I hope the provincial and federal governments will use this opportunity to increase funding to the healthcare system.*

**Personal dimensions of nurses’ SARS experience.** The respondents’ SARS experiences also reflected substantial personal implications of SARS for community nurses. They highlighted the emotional toll by citing the stress and frustration they experienced during the crisis and the personal sacrifices or costs associated with working under such conditions. Fifty percent of the comments described this type of experience.

Of the personal dimensions of the SARS outbreak, emotional toll accounted for the majority (30%) of the experiences described. Many of the comments reflected a fear of contagion, of infecting one’s family and friends. One nurse wrote that the assumption of personal risk “makes you realize that you are putting your family at risk and is making me think that perhaps nursing in the community is not the safest type of nursing out there.” The respondents’ sense of vulnerability to this risk varied according to their personal circumstances and the perceived consequences of exposure. For example, a single parent recounted:

*I feared exposing myself or my child to SARS. There was an incident where lack of others following protocol could have led to my possible exposure. I called my mother to collect my child and...stayed at work until this was done. I thought about what might happen to him if I died. Who would care for him?*

Empathy with as well as fear and concern for health-care providers in the Greater Toronto Area and SARS-affected areas were identified frequently: “…concern for my hospital colleagues who have had it way worse than PH [public health] Units”; “the emotion I felt especially with the death of 2 healthcare workers is heart wrenching — it could have very easily been a person I worked with had the outbreak occurred in my area of the country.”

The unknown nature of SARS unsettled even the most experienced nurses: “Not too many infectious diseases have frightened me over the
years (34 yrs since graduation) but this one has!” Such fears led some nurses to reconsider their jobs and to worry about future outbreaks.

In addition to the job-related effects of the increased workload, SARS caused difficulties for community nurses trying to manage the competing demands of work and family. This was a great source of distress: “Bottom line, it is my problem to pay for the additional hours of child care if shifts are required to be filled.” The juggling of work/family demands often had personal costs: “I rarely saw my husband and when I did I had little energy left for him. The strain almost cost me my marriage.” Nurses described personal sacrifices such as having to discontinue PhD data collection and paying an additional year of tuition, or experiencing loss of income due to reduced home visits.

Finally, some respondents shared information about somatic experiences that they linked to the SARS outbreak, describing nightmares, insomnia, loss of appetite, tension, and headaches. One nurse wrote, “I have found myself to be more tense, irritable. I am seeing a significant impact on my health.” Another stated, “I started having more nightmares re being yelled at by clients and managers. I developed aches and pains.”

**Atypical Responses**

The attitudes of very few nurses diverged from those reported above. For example, only 12 of the 941 respondents indicated that they believed the attention generated by SARS was exaggerated: “[I] thought [it was] overkill — goggles etc. [People had] unrealistic fears.” Finally, some community nurses indicated that SARS had little or no effect on their lives professionally (17%) or personally (12%). In most cases this lack of impact was attributable to geography rather than type of nursing environment.

**Learning from the SARS Experience**

Interwoven throughout the responses of this sample of community nurses was an emphasis on learning everything possible from the SARS experience in order to prepare for future outbreaks and to improve healthcare delivery. Included in the second overarching category, *Learning from the Experience*, were learning opportunities on personal, institutional, and global levels, professional development opportunities, and opportunities for gaining insight into policy and administrative implications. These positive learning outcomes were cited in 50% of the comments that referred to the organizational dimensions of the SARS experience.

*Learning opportunities.* Many community nurses saw the SARS outbreak as a unique opportunity for personal, institutional, or global learning. At the personal level, respondents viewed the working conditions imposed by SARS as challenging and exciting, allowing for the
“honing” of nursing skills. Many nurses believed that the knowledge gained would provide insight into preparedness issues.

At the institutional and global level, respondents cited the need to capitalize on the SARS experience in order to develop or refine policies, directives, and protocols as well as to attend to areas of weakness revealed during the crisis. “Nursing,” one respondent concluded, “is the critical link in protocol and advocacy for knowledgeable client populations. Recognition for this role should be a result of SARS.” Some nurses wrote that the problem extended beyond the SARS experience: “SARS is a ‘wake up’ call to [ensure] that sufficient resources are in place to deal with the…unknown (…future disease e.g., pandemic flu...).” One of the most frequently cited positive effects of the crisis was the exposition of flaws in the public health system, opening up opportunities to more adequately address areas of weakness.

**Professional development opportunities.** Another perceived positive effect of the crisis was the opportunity for professional development. Some respondents pointed out that managers and staff worked together for a common goal. Many nurses appreciated the chance to work with others, increase communication across different sectors of the health-care system and health-care professions, and develop collaborative relationships with physicians, agency inspectors, investigators, and public health nurses. Some respondents gained a new perspective on nursing as a career. McGillis-Hall and colleagues (2003), in their analysis of the media coverage of the crisis, found that military analogies were common both within the media and within nursing. This was also true of some community nurses, especially with reference to nurses working in hospitals: “Nurses have truly been heroes during this time, they have put themselves on the line for their clients and patients”; “…profound respect for those nurses who worked on the front lines in this crisis.”

**Opportunities for gaining insight into policy and administrative implications.** Many aspects of the crisis led respondents to consider policy and administrative responses to SARS. One frequently cited factor was a renewed and heightened awareness of potential infectious agents. The acknowledgement that similar viruses will emerge in the future suggested a renewed commitment to vigilance with regard to disease control.

Broader areas in need of improvement (i.e., prevention initiatives) and recognition (i.e., the critical role of public health) were also identified, as well as the importance of education in public health. Some comments referred specifically to areas of improvement at the practice and organization levels, and outlined how the SARS experience could address these shortcomings, while others dwelled on the role of nurses in achieving the needed improvements.
We, as nurses, need to be actively involved at all levels; we need respect for what we do and know; we need to ensure our younger colleagues know how to express themselves adequately — how to negotiate — how to insist and resist being swept along by others’ opinions when they do not agree.

The respondents also expressed the opinion that, despite all precautions, emergencies do happen and vigilance is needed in the development of emergency initiatives. Many nurses remarked on the benefits of having an emergency plan in place and expressed the view that risk-management measures and emergency planning had served the public well during the SARS crisis.

Discussion

The results of this study address the gap in the literature concerning the effects of disease outbreaks on community health-care providers. Although the nurses’ experiences reported here are specific to SARS, similar experiences may be expected for the outbreak of other infectious diseases that require isolation or precautionary measures. The strengths and weaknesses in practices and policies reported by the community nurses in this study may help to guide us in preparing for future epidemics and other demands on our health-care system. The response to SARS described by these nurses exposes both positive and negative aspects of public health infrastructures, risk-management strategies, and emergency response initiatives. The reported lack of coordination among the many groups of administrators, managers, and providers illustrates the dire need for emergency planners to consider the fallout from uncoordinated efforts and untimely or ineffective communication. Communication was a pivotal factor in the experiences of this community nursing sample. Changing directives, isolation protocols, and organizational support are all areas that were identified as significantly influenced by the quality of communication. Attention to the development of sound and effective communication practices — especially in community nursing, where practice is often decentralized — offers promise as a fundamental component of emergency planning.

The response to outbreaks of diseases such as SARS not only has serious implications for our health-care system and for public health but also takes a toll on the lives of health-care workers. At a time when staff shortages are adding tremendous stress to the lives of health-care providers and are taxing the health-care system, health emergencies can push the limits of sustainability. Many community nurses cited a supportive environment as helping them to cope with the stress and demands of SARS. Institutional, organizational, and collegial support,
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both practical and emotional, served to ease nurses’ burden during the crisis, not least because it helped them to avoid the negative consequences of any perceived lack of support. The establishment of an integrative support network may help health-care workers to negotiate the physical and emotional demands of health emergencies such as SARS. The isolation felt by many nurses and the negative reactions to which they were subjected are clearly unacceptable. Further, the complexity of having to deal not only with clients but also with the community in general points to the need for the education of health professionals and the public alike. Concern about public compliance and uncertainty about risk management must be met with vigorous enforcement of emergency protocols. Health-sector personnel and the public must work together to minimize risk.

Finally, we concur with Maunder (2003) that the SARS experience should be used to examine such issues as organizational culture, the fostering of collaboration, and the effectiveness of our health-care systems. Societal factors such as fund allocation and resource commitment place parameters around what is possible (O’Brien-Pallas, 2002), but government and institutional resource allocation must allow for the full execution of emergency planning if we are to — as urged by Health Canada (2003) — achieve the goal of a “seamless public health system.”

References


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