Surge Capacity and Casualization

Human Resource Issues in the Post-SARS Health System

Andrea O. Baumann, RN, PhD Jennifer M. Blythe, PhD Jane M. Underwood, RN, MBA

ABSTRACT

In Ontario, the unpredictable funding climate of the 1990s led health care organizations to look for ways to reduce costs. Adopting a just-in-time staffing policy, they employed fewer full-time workers, scheduled part-time workers to work regular shifts, took on more casual staff, and became increasingly reliant on agency nurses and overtime to cover shifts. These policies resulted in higher costs and reduced surge capacity, and placed the health of nurses and patients in jeopardy. Fewer staff meant more overtime. Stress-related absenteeism increased. Some nurses reacted to casualization by working for multiple employers.

During the SARS (severe acute respiratory syndrome) epidemic in Toronto, nursing resources were stretched to their limits. An exploratory investigation, based on relevant literature and interviews with 13 nurse administrators who held key positions during the epidemic, confirmed the lack of spare capacity in the health care system and indicated that community and long-term care sectors had less capacity than acute care. Low surge capacity in these sectors increased the vulnerability of the entire health care system. Capacity issues should be addressed as part of a larger human resources initiative to create a more flexible workforce. Since SARS, a number of government and organizational initiatives have been developed to increase nursing capacity.

MeSH terms: Severe Acute Respiratory Syndrome; health manpower; nursing staff; personnel staffing and scheduling

La traduction du résumé se trouve à la fin de l'article.

Nursing Health Services Research Unit, McMaster University, Hamilton, ON

Source of funding: Funded by the Ontario Ministry of Health and Long-Term Care

isease, terrorism, industrial accidents, and environmental disasters place great strain on health care systems. The outbreak of SARS (severe acute respiratory syndrome) in Ontario in the spring of 2003 alerted governments, employers, and the public to system deficiencies that put the community and health care professionals at risk. The SARS epidemic "highlighted that we currently have no redundancy or safety cushion in our health care system and [there is grave concern] about its capacity to deal with another crisis."1 This commentary focusses on staffing policies in the 1990s that decreased surge capacity in nursing workforces, policy outcomes as revealed by the SARS experience, and changes recommended in the aftermath of the epidemic. Arguments are based on evidence from published and grey literature, past research by the authors, and interviews with 13 nurse administrators who held key positions in hospitals, longterm care, and community health care organizations affected by the SARS epidemic.

The effects of casualization on nursing supply in Ontario

Traditionally, a high proportion of nurses were employed full-time. Part-time nurses provided routine coverage of absenteeism and a pool of casual workers were accessed during periods of heavy demand.² In the 1990s, an unpredictable funding climate led managers to speculate that they could eliminate overstaffing and save money by deploying personnel on a just-in-time basis. Casualization, the systematic replacement of full-time and regular part-time staff with staff employed on an ad hoc basis, became an important human resources strategy.³ Health care organizations terminated a proportion of their full-time staff and replaced their positions with part-time and casual appointments that offered neither stability nor fringe benefits. They routinely offered new nursing graduates part-time or casual work,⁴ provided part-time workers with regular schedules and longer hours, offered the remaining full-time workers overtime, and used agency staff on an increasingly regular basis. In 1986, only 33% of registered nurses (RNs) in Ontario were working part-time and casually combined.⁵ By 1998, 32.2% worked part-time and 18.6% worked casually.6*

Correspondence and reprint requests: Andrea Baumann, Co-Director, Nursing Health Services Research Unit, McMaster University, Faculty of Health Sciences, 1200 Main Street West, MDCL Room 3500, Hamilton, ON L8N 3Z5, Tel: 905-525-9140, ext. 22206, Fax: 905-522-5493, E-mail: baumanna@mcmaster.ca

Figures for Licenced Practical Nurses are not available for these years.

The trend toward part-time and casual employment decreased nursing workforce capacity in several ways. Some of the nurses who preferred full-time work chose to leave the profession rather than work parttime. Other nurses coped with insecurity by taking additional jobs.7 A minority preferred the variety, autonomy, or extra income resulting from multiple employment, but many took a second job because they could not find suitable full-time work. In either case, nurses who made up fulltime hours by working in two or more jobs could not supply the flexible labour that employers anticipated when they downsized full-time staff.8

The growth in nursing agencies was a reaction to shortage. Hospitals paid high rates for temporary staff despite concerns about cost, team stability, competence, and quality of care.^{1,8} Many had shortages in nursing specialties such as intensive care and emergency nursing due to underinvestment in education. Qualified nurses with specialty skills found it financially advantageous to work for an agency rather than a permanent employer. Policy-makers became aware that workforce productivity was falling and absenteeism was rising in step with overtime.9,10 After 1998, ratios of full- to part-time and casual nurses began to improve. Canadian nursing organizations began advocating for 70% full-time employment for RNs in Ontario.^{11,12} By 2003, 56.9% of RNs were working fulltime.⁶ However, positive changes were unequal across regions and health care sectors, and 15.9% of Canadian RNs still worked concurrently in two or more jobs.6

Nursing capacity in Toronto

During SARS, there was little spare nursing capacity in Toronto. In 2002, the proportion of full-time registered nurses employed in all health care sectors in Toronto (64%) was higher than in other parts of Ontario (55%), but more nurses (21.2%) had multiple employment than elsewhere in the province (13.7%).6 The high proportions of casual workers in the city reflected the availability of agency work and the ease of acquiring multiple jobs at that time. A survey carried out in the city suggested it was common for part-time and casual nurses to work for multiple employers, but that a substantial number of full-time nurses also worked casually or part-time.1

Figures for sectoral differences were not available. However, while interviewees from acute care agreed that full-time employment had risen since 1998, representatives from long-term care organizations believed their full-time rates were relatively low and that many RNs had concurrent jobs. In the home care sector, managed competition meant agencies competed for time-limited contracts and could not offer stable employment or wages comparable to acute care. Interviewees suggested that two thirds of RNs in not-for-profit agencies and up to 90% in for-profit agencies were part-time and most had concurrent jobs. In contrast, the majority of public health employees were full-time. However, in 1999, the province reduced its funding contribution from 75% to 50% and municipalities eliminated or downsized programs. Subsequently, the supply of public health nurses fell in proportion to population growth.¹³ Although the acute care hospital sector is the largest health care employer, nurses in long-term care and the community also play key roles in health care delivery. Successful containment in emergency situations such as SARS can be compromised by staffing problems in any sector.

Staffing and SARS

Interviewees from acute care hospitals reported that SARS created deployment problems, but staffing was adequate in the short run. Some overtime work was necessary, but cancelling surgery and closing emergency departments permitted some nurses to be reassigned to understaffed areas. A number of nurses were seconded to Toronto from elsewhere in Ontario. High pay rates and full-time work meant that few nurses left their jobs. Nevertheless, hospitals could not have coped with a protracted epidemic. Specialist nurses and infection control personnel were in short supply, and SARS cases among staff, quarantined nurse contacts, and loss of staff to other organizations were hazards.1

Although SARS was largely confined to acute care hospitals, all health care agencies were affected. Interviewees from long-term care facilities reported that infection control protocols eliminated care provided by volunteers and family members. When movement between hospitals was prohibited, some RNs with concurrent jobs opted not to work at hospitals with SARS patients, but others were attracted by promises of double pay. Community nurses with concurrent jobs also chose to work elsewhere. Leiterman¹⁴ noted: "Staff that worked even 1 shift in a hospital were not allowed to work their other 9 shifts in the community sector." Nurses with multiple jobs suffered financially and left their colleagues overextended.¹⁵ Home care nurses found that using protective equipment took time and because their employers could not afford money for overtime, they spent less time with patients.

In public health departments, priorities such as case management, contact tracing, supervising quarantine, and staffing information lines¹⁶ precipitated radical reorganization. Agreements with unions led to the replacement of the normally autonomous five-day work week with a structured twoshift, seven-day system. Some programs were suspended and personnel redeployed. Others sought assistance from qualified nurses, physicians, public health inspectors, and epidemiologists from other regions.

Toronto health care services coped with SARS because staff was dedicated and responsive. There was also an element of luck. If the outbreak had coincided with the influenza season, differentiating SARS would have been an overwhelming task.¹⁷ Had SARS spread beyond acute care into the community, as had occurred in Hong Kong, services would have been overburdened.¹⁸ Fortunately, health care organizations were relatively well staffed because summer vacation had not yet started. Coincidence of the outbreak with the March break and the end of the hospital fiscal year meant fewer surgical patients.

Strategies for change

SARS highlighted the need for organizations to improve their ability to forecast human resources requirements under various circumstances. By casualizing the workforce, planners had created a shortage rather than cost-effective just-in-time staffing. Nurses who had rejected part-time or casual work with a single employer left the profession, acquired multiple jobs, or sold their services to nursing agencies. In the wake of SARS, the Ministry of Health Policy incorporated the full-time/part-time nursing ratio of 70:30 recommended by the Walker Report.¹⁹ The Campbell Commission recommended the overall restructuring of the public health system to increase capacity.²⁰

Currently, hospitals throughout the province are attempting to increase fulltime rates,^{11,21,22} but progress has been uneven. In 2004, 69% of Ontario nursing graduates were still being offered only parttime positions.⁵ The percentage of nurses with multiple jobs has decreased.⁶ However, the pay inequity among nursing sectors that encourages multiple employment has not been addressed.

SARS drew attention to problems of continuity arising from ad hoc staffing during crises. Restrictions placed on nurses with concurrent jobs led to short-staffing for employers and financial hardship for individuals. Employing a higher complement of staff is more cost-efficient than reliance on overtime and agency staff, and is safer for staff and patients.²³ Casual staff and agency nurses cannot provide the continuity required for effective teamwork under pressure. Emergency preparedness requires a stable staff, including sufficient emergency and intensive care nurses on site and centralized resource teams of crosstrained nurses.24

REFERENCES

- Registered Nurses Association of Ontario (RNAO). Survey of Casual and Part-Time Registered Nurses in Canada. Toronto, ON: Author, 2003.
- Baumann A, Blythe J. Nursing human resources: Human cost versus human capital in the restructured health care system. *Health Perspectives* 2003;3(1):27-34.
- Richardson S, Allan J. Casualization of the nursing workforce: A New Zealand perspective on an international phenomenon. *Int J Nurs Practice* 2001;7:104-8.
- Baumann A, Cleverley K, Blythe J, Grinspun D, Tompkins C. *Educated and Underemployed: The Paradox for Nursing Graduands.* Hamilton, ON: Nursing Health Services Research Unit, 2005.
 Ryten E. A Statistical Picture of the Past, Present
- Ryten E. A Statistical Picture of the Past, Present and Future of Registered Nurses in Canada. Ottawa, ON: Canadian Nurses Association, 1997.

- 6. Canadian Institute for Health Information. Registered Nurse Database: Supply and Distribution of Registered Nurses in Canada, 2002. Ottawa, ON: Author, 2003.
- Baumann A, O'Brien-Pallas L, Armstrong-Stassen M, Blythe J, Bourbonnais R, Cameron S, et al. Commitment and Care: The Benefits of a Healthy Workplace for Nurses, Their Patients and the System. Ottawa, ON: Canadian Health Services Research Foundation, 2001.
- Blythe J, Baumann A, Zeytinoglu IU, Denton M, Higgins A. Full-time or part-time work in nursing: Preferences, trade-offs and choices. *Healthcare Q* 2005;8(3):69-77.
- Baumann A, Blythe J, Denton M, O'Brien-Pallas L, Zeytinoglu IU. [The new health care worker: The implications of changing employment patterns]. Unpublished raw data, 2002.
- O'Brien-Pallas L, Thomson D, Alksnis C, Bruce S. The economic impact of nurse staffing decisions: Time to turn down another road. *Hospital* Q 2001;4(1):42-50.
- Registered Nurses Association of Ontario. The 70 per cent Solution: A Progress Report on Fulltime Employment for Ontario RNs. Toronto, ON: Author, 2005.
- 12. Canadian Nursing Advisory Committee. Our Health, Our Future: Creating Quality Workplaces for Canada's Nurses. Ottawa, ON: Author, 2002.
- Underwood J, Alameddine M, Baumann A, Deber R, Laporte A, Eager K. Nurses in Public Health in Ontario. Hamilton, ON: Nursing Health Services Research Unit, 2005.
- 14. Leiterman J. VON Canada's brief to the Independent SARS Commission, 2003.
- Community Health Nurses Initiatives Group. Lessons Learned From SARS: The Experiences of Community Health and Public Health Nurses.

Submitted to the Registered Nurses Association of Ontario, 2003.

- SARS Commission. Interim Report: SARS and Public Health in Ontario. Toronto, ON: Ministry of Health and Long-Term Care, 2004.
- Crighton ER, Moineddin R, Upshur REG, Mamdani M. The seasonality of total hospitalizations in Ontario by age and gender: A time series analysis. *Can J Public Health* 2003;94(6):453-57.
- Callery S. The SARS Outbreak: Sharing Strategies and Experiences with Regions of China. Presentation at OHA, October 2, 2003.
- National Advisory Committee on SARS and Public Health. Learning from SARS: Renewal of Public Health in Canada. Ottawa, ON: Health Canada, 2003.
- 20. SARS Commission. Second Interim Report: SARS & Public Health Legislation. Toronto, ON: Ministry of Health and Long-Term Care, 2005.
- Nursing Sector Study Corporation. Building the Future: An Integrated Strategy for Nursing Human Resources in Canada. Phase 1. Final Report. Ottawa, ON: Author, 2005.
- 22. Ontario Expert Panel on SARS and Infectious Disease Control. For the Public's Health: A Plan For Action. Toronto, ON: Government of Ontario, 2004.
- Baumann A, Underwood J. Innovation and Strategies for Addressing Nursing Workload. (Working Paper 02-01). Hamilton, ON: Nursing Effectiveness Utilization & Outcomes Research Unit, 2004.
- 24. Hayward M. Pre-hospital response to major incidents. *Nursing Standard* 2003;17(30):37-40.

Received: April 22, 2005 Accepted: December 2, 2005

RÉSUMÉ

En Ontario, l'imprévisibilité budgétaire des années 1990 a amené les établissements de soins à trouver des moyens de réduire leurs coûts. Optant pour une politique de dotation « juste à temps », ils ont embauché moins de travailleurs à plein temps, affecté leurs travailleurs à temps partiel à des postes de jour, embauché davantage d'employés occasionnels et fait massivement appel à des infirmières engagées par des agences et aux heures supplémentaires de leurs propres employés pour compléter les équipes de travail. Ces politiques ont entraîné des coûts plus élevés et réduit la capacité de gérer l'imprévu, et elles ont compromis la santé des infirmières et des patients. Avec un personnel réduit, les heures supplémentaires ont augmenté. L'absentéisme lié au stress a augmenté lui aussi. Certaines infirmières ont réagi à la précarisation de leur emploi en travaillant pour plusieurs employeurs.

Pendant l'épidémie de SRAS (syndrome respiratoire aigu sévère) à Toronto, les ressources infirmières ont été étirées au maximum. Une enquête préliminaire fondée sur des études pertinentes et sur des entretiens avec 13 infirmiers et infirmières cadres qui occupaient des postes clés pendant l'épidémie a confirmé l'absence de capacité d'appoint dans le système de soins de santé et montré que le secteur communautaire et celui des soins de longue durée avaient une moindre capacité que le secteur des soins actifs. La faible capacité de gérer l'imprévu dans ces secteurs a accru la vulnérabilité de tout le système de soins. Les problèmes de capacité devraient être abordés dans le cadre d'une initiative générale de mise en valeur des ressources humaines qui viserait à produire une main-d'œuvre plus polyvalente. Depuis le SRAS, un certain nombre d'initiatives gouvernementales et organisationnelles ont été élaborées pour accroître les ressources infirmières.