WORKLOAD AND OCCUPATIONAL STRESS IN NURSING

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Stress has long been recognized as a pervasive feature of work for nurses and there is evidence that it may be increasing in severity (Calhoun, 1980; Clever & Omenn, 1988; Gray-Toft & Anderson, 1981; Haché-Faulkner & Mackay, 1985; Kahn & Westley, 1984; Klitzman & Stellman, 1986; Leatt & Schneck, 1985; Martin, 1984; Parasuraman & Hansen, 1987). This paper presents qualitative data from a study of nurses' experiences with regard to occupational stress. The major source to which they attributed their stress was workload; that is the focus here. In addition to the amount of work (perhaps the most immediate connotation of workload) other aspects of the problem will be considered. It will be argued that the significance of heavy workloads can only be fully understood in the context of other features of nurses' work, as well as "cutbacks" in public funding of health services. Yet as we note in conclusion, it is difficult to situate nursing in this broader context, given the absence of good documentation of the work nurses do and the ways in which it has been changing.

Method

Between November 1984 and March 1985, a total of 123 interviews were conducted with nurses employed in two hospitals in southern Ontario. The nurses were part of a larger sample of 492, which included 311 industrial workers as well as 58 other hospital employees. Industrial workers were drawn from six workplaces — carpet manufacture, two steel companies, aluminum can, rubber and brake manufacturing. The hospital workers were in housekeeping and laboratories. Nurses were analysed separately because they formed the largest most homogeneous group in the hospitals, who were also distinctive in their professional status. Clinical areas in nursing were chosen in consultation with nurses' health and safety representatives. The sample in each hospital included Registered Nurses and Registered Nursing Assistants working in a general medical ward, in the operating room and as I.V. nurses. One hospital (415 and 722 beds in two locations) was unionized

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and the nurses' union distributed letters from us to their members, explaining the nature of the study. Nurses were asked to instruct their union if they did not wish to have their name released. From the lists of those who did not object to the release of their name and address (82% agreed to this) either names were selected at random, or, if the numbers in an area were small, everyone was asked to participate. The other hospital (435 beds) was non-unionized, and in this case the administration provided appropriate complete lists of names and addresses from which a random sample was drawn. The response rates for nurses in the unionized and non-unionized hospitals were 64% and 73% respectively.

Ninety eight per cent of the sample were women and 59% were employed full time. With respect to age distribution, 21% were under 30 years, 47% were between 31 and 40, 27% between 41 and 50, and 5% were over 50. Thirty seven per cent had been with their present employer for less than five years, 18% had been employed in the same hospital for between five and nine years, 26% for ten to 14 years, and 19% for 15 years or more. Registered Nurses constituted 80% of the sample; the interviews with them and with the Registered Nursing Assistants were analysed together, so that this paper does not seek to identify differences between the two groups.

Respondents were interviewed about hazards in their workplaces and their knowledge and perceptions regarding various aspects of occupational health and safety. Interviews were conducted by trained interviewers. They usually took place in respondents' homes and, on average, lasted for about two hours. One component of the interview concerned stress. Each person was asked "Do you feel stress as a result of your work?". If the answer was yes, this was followed up with "What causes it?" and "Has stress from work affected your health and safety?"; "How?". The data presented below focus on the responses to these questions, in particular, respondents' descriptions of the sources of stress. The questions were open-ended and answers were recorded verbatim.

The magnitude of the differences between nurses and industrial workers suggests that the high levels of stress reported by nurses were not an artifact of the questions posed. Eighty seven per cent of nurses reported occupational stress, compared with 59% of industrial workers (X^2=28.74, p<.001). Work-load was identified as a stressor by 71% of these nurses and by 32% of the blue collar workers (X^2=42.03, p<.001). Other data from this study are reported in Walters and Denton (forthcoming) and Walters and Haines (1988a, 1988b).

The approach in this research departs from that which is most common in the literature on job-related stress in that respondents were not presented with predetermined categories of response. Instead, the aim of the analysis

was to grasp nurses' own definitions of their situations. While broad themes were quantified, the focus was not on statistical analysis and the identification of discrete categories. Rather, the qualitative data are emphasized so as to convey better the meaning which nurses ascribed to their experiences, and, the ways in which they saw these experiences as being interrelated — a fabric of connectedness which is communicated most readily through qualitative analysis.

Perceptions of Stress

A profile

Eighty seven per cent of nurses reported stress as a result of their work. Stress was experienced as something negative; hardly any respondents spoke of the benefits of stress. Comments such as, "It is energy feeding for me," and "I'm very comfortable in what I do. The stress I feel helps me function better — it's not a harmful thing," were extremely rare. Another pattern was that almost no one referred to safety hazards, exposure to various toxic substances, or the threat of infectious diseases. While these problems were discussed at other points in the interviews, they were hardly ever raised in relation to stress. Instead, respondents emphasized the psycho-social environment, not the physical environment. The primary causes identified were: heavy workload (mentioned by 71% of those reporting stress); problems with supervisors and other authority relations (31%); high levels of responsibility (28%); fear of mistakes (21%); hours and scheduling of work (20%); dealing with patients and their families (17%); relations with co-workers (15%); and coping with death (15%).

Of the nurses who reported stress, 53% said that it had affected their health already in some way. Among the nurses who had experienced health effects, 9% said their health had been affected a great deal and 46% said that the effects were moderate. The main health effects they reported were headaches and muscle tension (mentioned by 39%) and emotional problems such as anxiety, tension, irritability and depression (mentioned by 21%). The vast majority of the sample felt that stress could affect health.

Workload was identified as the primary source of job related stress; as such, it is the central focus in this paper. Its significance is multifaceted and the following sections show how it cannot be artificially divorced from the other categories of attribution — that workload assumes added significance in the context of other features of the work.

Quantity and quality of work

When nurses spoke of workload as a source of stress, without exception they meant overload, not underload. The prime manifestation of this was the

pace of work. Respondents spoke of the "rush, rush, rush": "The workload is so heavy you think you can't cope with it;" "You have work that has to get done, you miss breaks and lunches; you are pushed and pushed and pushed;" "It's hectic;" "There's too much to do in too short a time. The beeper's going off every five minutes."

The problem of overload was consistently linked with being short staffed and feeling the pinch of "cutbacks": "We're understaffed. The bottom line is, no money;" "There's not enough money for more staff;" "Everything is budget, you know." Several respondents noted increases in numbers of patients without corresponding increases in nurses. "The pressure is getting more now than before. Less staff. Patients are getting sicker than they were 10, 15 years ago."

While the quantity and the pace of work was a primary theme, other issues also stood out and highlight the relationships between different elements in the work. Alongside the issue of quantity of work there was also that of the quality of work. These appeared to go hand-in-hand; quality became an issue partly because of the fast pace of work. "You are so busy, you don't have time to do the job safely." Errors could have consequences for patients' welfare, as well as for nurses themselves and this dual responsibility was summed up by one nurse who pointed out that a hospital is not a typical work environment because "it's not just your workplace, you have patients to worry about too". Many respondents noted the possibility of accidents and errors because people might become "sloppy" or "careless" because of fatigue. Some pointed out that they had to take short cuts because they just couldn't handle the workload otherwise. "Anyone who says they haven't is a liar." Another nurse said that, "You don't have the time to be extra careful." Others noted that you have to establish priorities and, "You do the top priority things first, the rest doesn't get done or done well." Some simply acknowledged that they didn't work quite as well after a certain point: "I don't hit the veins as well at the end of the shift as at the beginning."

The possibility of a deterioration in the quality of patient care had threatening implications. The charges laid against Susan Nelles and the subsequent commission of enquiry, have made nurses more aware of their legal accountability and vulnerability. One writer (Day, 1987) has described the events as a modern day witch hunt, and there is persuasive evidence that nurses were made scapegoats. In such a context, workload and quality issues assume an added dimension.

> You become too careless and people suffer. There is never enough time and you get worried that you might not be doing something with enough care but you have to get on with it. And with this Susan Nelles thing, you have to make sure you cover yourself. You get overtired, rundown and irritable.

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Given accountability for decisions, yet lack of support, heavy workloads are especially stressful because they help to create the conditions in which the quality of work can deteriorate. The problem is further aggravated by the wide role set of nurses and the tensions within this.

Limits to autonomy

Apart from the impact of fiscal restraints, nurses' autonomy is restricted in other ways too. Their role set is wide and the potential for conflicting demands is high. They have to deal with their own nursing superiors, fellow nurses, doctors, patients, patients' families, housekeeping staff and the administration. The expectations within this network can be contradictory, unpredictable and high; the cumulative workload and uncertainty become stressful.

> There are too many things to do. Expectations are high and they come from diverse levels — the patients, the relatives, co-workers, the doctors. The doctors especially want the tests done *now*. Instant decision making causes stress. The condition of patients can change in a minute and you have to make decisions that you are accountable for.

> There is always someone who is nattering at you — the patients, the doctor, the head nurse. It doesn't matter what you do, how fast you work or how well you work, someone is on you. You get it even if something happens that isn't your fault. Doctors are, frankly, a supreme pain.

Within this role set, relationships with doctors can be particularly problematic and nurses' accounts of their difficulties highlight their professional subordination. The resulting problems can be felt more intensely when there is already short staffing and nurses are tired, working at their limits. Doctors' reactions were often described as quite negative and temperamental. In nurses' eyes, they "think they are gods" and "you have to grovel", or "they have short tempers and could end up yelling at you."

> There's things that surgeons want but can't have because of budget cuts. They jump up and I can't do anything about it. You can stand on your head and spit nickels some days and it won't matter, it's not good enough for them.

It was difficult to establish a dialogue because physicians "tend to tell you what to do and they're not interested in hearing what you have to say." Nurses described the struggles that could follow unreasonable demands from doctors; "We just told him we wouldn't do it until we got help, which we finally did." Again, nurses can become scapegoats:

Doctors! That's stress right there. I have worked with men with no patience with things that go wrong. When something does go wrong, it's you that get's the blame. Some girls just have to leave surgery when they get upset. Some nurses leave angry with tears in their eyes. When you are told you are not doing your job properly, it puts you on edge. You wonder what you are going to do wrong next. You get nervous and tense.

The accountability of nurses, the conflicting expectations they face and their professional subordination all point to nurses' limited control over their work. Each of these can exacerbate the stress associated with heavy workloads, and the hectic pace associated with heavy workloads may further erode nurses' sense of control over their work. Other comments too, were symptomatic of this lack of autonomy — comments about the satisfaction they derived from work and their inability to organize their work according to their own conception of its "core" elements.

Diminished satisfaction

A heavy workload can affect the quality of patient care and this was inconsistent with respondents' conception of their role. For nurses, who saw themselves as serving patients, this challenge to the caring elements of their work was a source of frustration and stress. Respondents often linked the pace of work with ways in which they could no longer spend time on some things that they saw as important parts of their work.

Some expressed their views in general terms: "I feel stress from not being able to take the time to do the job the way I'd like to," or, "We don't have enough staff and there are personal commitments and goals that are not being met because you are too busy." More specifically, what was irksome were the limits on patient care. One nurse said that they are becoming technicians and implied that the emotionally supportive elements of the profession are disappearing; "There's far less time with the patient". Another said "I do not feel I'm the caring nurse I used to be," and others expressed similar feelings.

> We work 12 hours yet we never have enough time to be with each patient and give proper care.

> You cut corners but not to put anyone in danger. I would like to talk to patients and give explanations for what I'm doing but I don't have time.

The theme of limited satisfactions, of not being able to focus more on patient care, was paralleled by another set of comments that distinguished

between "core" features of the work and other things respondents had to do in their jobs.

"Core" vs other work

What constituted the "core" work was not always clear, but such distinctions between usual or important or more meaningful work and "other" work ran through the interviews. In part, this represented an ordering of priorities. In part, the other work was seen as an unwelcome or unnecessary addition to normal work routines. The comments above suggested priorities — that the important work of patient care is suffering and being sacrificed because of cutbacks and staff shortages. Other respondents drew the boundaries in different ways, but it was common that some type of distinction was made. That which was "extra" or "other" was the more frustrating, because it interfered with the core work and forced compromises: core work was not done or not done as well as it might otherwise have been. Such distinctions again signify nurses' lack of control over definitions of priorities — the limits on their ability to place core activities first and thereby define the nature of nursing work.

For some respondents it was paperwork, the administrative details, that took them away from what they saw as their work: "It's stress from workload...trying to do a job and doing the administrative stuff on top of it." Others made a distinction in terms of time: "Overtime, to me, is work I do that's extra, that I don't get paid for." For another nurse it was the challenge of learning new skills (in this case how to use a computer) that took time away from other things.

There were also elements of work that were created by others. For example, nurses spoke of the frustration of facing a heavier workload because fellow nurses were not completing their own duties. It might be the case that "older staff don't work fast enough" or grumbles that "floor nurses could be doing what I.V. nurses are doing." Some respondents spoke of colleagues who weren't very committed to their work and created extra work for others.

> If you work with a nurse that is there to collect her monthly rate and doesn't give a poop what is going on, then you must pay attention to what she is doing or not doing.

A nurse might have extra work to cover for a receptionist who is off duty or they might have to do what they characterized as non-nursing jobs.

On top of this there is the work generated by doctors, this again points to the limits of nurses' control over their work.

The hospital has a lot of infectious diseases and doctors do a number of studies on these, except it's the nurses who do the work. We have to drop everything and do the bloody study. As if we didn't have enough work to do. The doctors tell us that they are saving the hospital dollars, because the drugs are free. But it's the nurses who save the dollars. We do all the work and get paid no extra.

Of course, nurses also seek to assert some control over their work. Directors of nursing report that nurses are less willing to perform duties not specifically part of their own job description (Kahn & Westley, 1984). It is likely that nurses are drawing more clearly the boundaries of their work in an effort to manage an increasing and often unpredictable workload. They may resist in other ways too. For example, one nurse described the advice she received from a more senior colleague — not to respond immediately to paging, but to deliberately finish what she was doing and thereby try to establish her own priorities.

Comments

Two themes emerge from the analysis presented here. One concerns the way we conceptualize workload. The other highlights the lack of information on what nurses actually do in the course of a working day. Nurses' accounts of the stress they experienced suggest that workload should not be interpreted as simply "more work". Its significance lies also in the ways in which increased demands on nurses are linked with other features of the work, such that they have to be viewed as interconnected elements of the occupation. For example, more work, working faster, assumes a greater significance because of nurses' accountability, because of the fact that they are responsible for patients' lives and health, and because they have reason to believe that errors might be too readily attributed to them. The lack of predictability and their lack of control emerge in these accounts. They are compelled to prioritize different elements of the work, but not according to their own definitions of the core features of the occupation.

Increased workloads were attributed to government health care policy. Yet it was in the search for validation of nurses' comments and measures of how their work has changed, that we became aware of the absence of such information. It is difficult to situate nurses' accounts in a broader context. Changes in the health care sector suggest that nurses' workloads have also been changing. The development of medical technology has added new forms of work to traditional responsibilities (Strauss, Fagerhaugh, Suczek, & Wiener, 1985). Efforts to reduce the demand for hospital care have encouraged shorter stays; this has increased patient turnover and created a patient population that is sicker and more in need of nursing care. So too, do new management systems appear to have increased workloads (Campbell, 1987,

1988). These changes have all occurred at a time when provincial governments have been promoting efficient financial management and the transformation of hospitals into "business-oriented institutions" (Ontario, Ministry of Health, 1983). Intuitively then, we are led to assume that technological change plus the tightening of the purse strings have altered and increased workloads for hospital employees. However, there are few published measures of what nurses do and how this has been changing. Information on ratios of hospital beds to full-time equivalent nurses, even when combined with data on changing levels of support staff, tell us little about what nurses actually *do*. And as Campbell (1988) has argued, new methods of accounting nursing time do not include many aspects of nurses' work.

The data presented here suggest that workloads are problematic for nurses. They also suggest that workload is not amenable to simple quantitative measures: its significance lies also in its links with accountability, the subordinate status of nurses, their limited control over aspects of their work; the interconnected elements of the work we have portrayed here. A more thorough and subtle appreciation of what nurses actually do would help to document their changing conditions of work — one step in understanding links between work, stress and health.

REFERENCES

Calhoun, G. L. (1980). Hospitals are high stress employers. *Hospitals 54*: 171-172, 175-176.

Campbell, M. (1988). The structure of stress in nurses' work. In Singh Bolaria, B. and Dickinson, H.D. (Eds.) *Sociology of Health Care in Canada* (393-405) Toronto: Harcourt Brace Jovanovich.

Campbell, M.L. (1987). Productivity in Canadian nursing: Administering cuts. In Coburn, D., D'Arcy, C., Torrance, G., New, P. (Eds.) *Health and Canadian Society: Sociological Perspectives.* (463-475) Toronto: Fitzhenry and Whiteside.

Clever, L.H. and Omenn, G.S. (1988). Hazards for health care workers. *American Review of Public Health 9*: 273-303.

Day, E.B. (1987) A 20th century witch hunt: A feminist critique of the Grange Royal Commission into deaths at the Hospital for Sick Children. *Studies in Political Economy 24*: 13-39.

Gray-Toft, P. and Anderson, J. G. (1981). Stress among hospital nursing staff: Its causes and effects. *Social Science and Medicine 15A*: 639-647.

Haché-Faulkner, N. and Mackay, R. C. (1985). Stress in the workplace: public health and hospital nurses. *Canadian Nurse 81*: 40-42.

Kahn, J. Y. and Westley, W. A. (1984). *The Working Environment in Canadian Hospitals: Constraints and Opportunities.* Labour Canada, Ottawa.

Klitzman, S. and Stellman, J.M. (1986). *The Health and Well-being of OPSEU Members Employed in Six Institutions in the Province of Ontario.* New York: Klitzman and Stellman.

Leatt, P. and Schneck, R. (1985). Sources and management of organizational stress in nursing sub-units in Canada. *Organization Studies 6*: 55-79.

Martin, T. (1984). Role stress and inability to leave as predictors of mental health. *Human Relations 37:* 969-983.

Ontario, Ministry of Health (1983). *Annual Report.* Queen's Printer, Toronto.

Parasuraman, S. and Hansen, D. (1987). Coping with work stressors in nursing: Effects of adaptive versus maladaptive strategies. *Work and Occupations 14:* 88-105.

Strauss, A., Fagerhaugh, S., Suczek, B. and Wiener, C. (1985). *Social Organization of Medical Work.* Chicago: University of Chicago Press.

Walters, V. and Denton, M. (forthcoming). Workers' knowledge of their legal rights and resistance to hazardous work. *Relations Industrielles.*

Walters, V. and Haines, T. (1988a). Workers' perceptions, knowledge and responses regarding occupational health and safety: A report on a Canadian study. *Social Science and Medicine* 27(11):1189-1196.

Walters, V. and Haines, T. (1988b) Workers' use and knowledge of the 'internal responsibility system': Limits to participation in occupational health and safety. *Canadian Public Policy* XIV(4):411-423.

RÉSUMÉ

La charge de travail et le stress professionnel des infirmières

Cette étude fait état du stress professionnel vécu par les infirmiers(ères). On apprend qu'une lourde charge de travail est la principale source de stress et qu'elle est souvent associée à des contraintes financières. L'analyse qualitative des données indique que la charge de travail reflète plus qu'un simple surcroît de travail. Une lourde charge peut également porter atteinte à la qualité du travail. Son influence est d'autant plus grande que les infirmiers(ères) sont tenu(e)s responsables de leurs erreurs et omissions, qu'ils(elles) ne jouissent que d'une autonomie limitée et qu'ils(elles) ne sont pas en mesure d'organiser leur travail selon leur propre perception des éléments essentiels. En conclusion, les auteurs soulignent la nécessité d'élargir la notion de charge de travail, d'approfondir les effets de la politique en matière de soins de santé et de mieux documenter les diverses composantes du travail des infirmiers(ères).