

EIGHT- AND TWELVE-HOUR SHIFTS AND WELL-BEING AMONG HOSPITAL NURSES

Eileen McPhail Jennings . Alfred W. Rademaker

Nursing is one of the professional occupations that involves work over the 24-hour period. As length of shift changes we should be aware of the effect on the persons involved. It is important that schedules allow the nurse to balance her personal and professional responsibilities, in order to be able to manage the inherent stresses of her job (McGillick, 1983). A work schedule can enhance non-work time by providing blocks of time that permit a greater variety of activities and provide support and encouragement through increased contact with family and friends (Cunningham, 1982). In recent years, many hospitals across Canada have experimented with various types of shift (S.C. Wynn, personal communication, October 28, 1980). One of the most common shifts implemented on nursing units is the 12-hour shift.

The main objective of this study is a comparison of 8- and 12-hour shifts.

Literature Review

Studies of the 12-hour shift, for the most part, have fallen victim to what is termed "missionary zeal" (Hellreigel, 1972). The articles are filled with opinion, hope and short-term results, rather than with sound research and long-term results. It may take as long as a year before adjustment to a new schedule has stabilized into a predictable pattern (Nord & Costigan, 1973; Swimmer, 1974).

An area equally lacking in information is that concerning women shift workers (Colligan, 1980; Harrington, 1978). They almost exclusively fill some occupations, nursing being one of the most notable. Åkerstedt, Fröberg, Levi, Torsvall, and Zamore (1977), in reporting the results of a series of Scandinavian studies of shift work, noted differences between men and women. Women experienced less fatigue and had a more favourable attitude toward shift work, but had a higher absence from work. Charles and

Eileen McPhail Jennings, RN, M.Sc., is a research assistant in the Faculty of Nursing, at the University of Calgary. Alfred W. Rademaker, Ph.D., is Adjunct Associate Professor in the Department of Community Health Sciences, Faculty of Medicine, at the University of Calgary.

Brown (1981) noted that women work nights without any fundamental transformation in the sexual division of labour, so those with families meet the (daytime) needs of their children at the expense of their own well-being.

Studies of the various patterns of shift work have shown it to have a negative effect on family and social life (Finn, 1981; Maurice, 1975; Staines & Pleck, 1984), and there is growing evidence that psychosocial factors supersede physical factors in the choice of hours of work (Colligan, 1980; Harrington, 1978; Maurice, 1975; Tasto, Colligan, Skjei, & Polly, 1978; Wojtczak-Jarowzowa, 1978). While the physical aspects of shift work should not be overlooked, more attention should be paid to psychosocial factors.

Another finding is that approximately 20% of all shift workers never adapt to shift work and must, therefore, leave it (Harrington, 1978; Tasto et al., 1978; Thiis-Evensen, 1958).

These findings highlight the necessity for greater understanding of whether certain shift schedules provide a better balance between a nurse's job demands and psychosocial needs.

In three Canadian studies (Eaton & Gottsleig, 1980; Hibberd, 1973; Stinson & Hazlett, 1975), pretest/posttest comparisons were made of nursing staff switching from the 8- to the 12-hour shift. In the two earlier studies the 12-hour shift was implemented on a trial basis. Hibberd's (1973) findings showed that patient care and cost of staffing were not affected by the 12-hour shift, but job satisfaction, as measured by a self-developed Job Satisfaction Questionnaire, was lower in the 12-hour groups and that the staff did not like the new schedule. In Stinson and Hazlett's (1975) study, work satisfaction and physician opinion were not adversely affected by the 12-hour shift and the majority of nursing staff were in favour of the new schedule. Work satisfaction, health, fatigue and alertness levels, and quality of care were not adversely affected by the 12-hour shift in the third study (Eaton & Gottsleig, 1980). In fact, several significantly positive items were associated with the 12-hour shift and nursing staff wished to continue with their new schedule.

This study differs from the previous studies in that it did not ask staff to compare the 8- and 12-hour shifts. It was presented as a survey of the work environment. Twelve of the 16 units involved had been on their respective schedules for longer than a year and had not requested a change in their shift length. The remaining four units had requested a change from the 8- to the 12-hour shift. At the time the study was initiated, the outcome of these requests and the timing of that decision were unknown to both the units involved and the writers.

Purpose

The purpose of this project was to determine the effect of 8- and 12-hour shifts on the well-being of staff nurses, and whether schedule dissatisfaction and the outcome of the changeover requests differentiated that group of units from the other two groups.

Definitions

Well-being: the physical, mental, and social health of the subjects as measured by the instruments used in this survey.

Established shift: those units where a shift has been in effect for longer than a year and where there has been no request for a shift change.

Unestablished shift: those units where there has been a request for a shift change.

Quality of Work Life (QWL): the quantitative score of the difference between the (perceived) existing work environment and the desired work environment. The smaller the difference (i.e., the closer the fit), the higher the assumed quality of work life. QWL is viewed as the antithesis of stress; stress being the perceived disparity between the existing and desired situations.

Quality of Social Life (QSL): similar to QWL, except that it measures the social environment.

Research questions

Research Question 1: Are there any differences between the groups with established 8- and 12-hour shifts for the following clusters of variables: job satisfaction; aspects of the work and off-work environments; sickness absence; use of drugs; sleeping and eating patterns; fatigue or mental well-being?

Research Question 2: Do the groups with an established shift exhibit greater well-being than the groups with an unestablished shift? Specifically, do they have greater job satisfaction and mental well-being or healthier eating and sleeping patterns? Are they happier with aspects of their work and off-work environments? Do the established shifts groups manifest less sickness absence, use of drugs, and fatigue?

Research Question 3: Do the groups with an established shift change over time in any of the following clusters of variables: job satisfaction; QWL

total; sickness absence; use of drugs; desired minus actual hours of sleep; or mental well-being.

Research Question 4: Does denial of the request for changeover result in decreased well-being in Group 3 (those with an unestablished shift) as measured by the clusters of variables cited in the latter research question?

Method

Subjects

The subjects, a convenience sample of all permanent part-time and full-time staff nurses employed on 16 nursing units of a large, metropolitan teaching hospital, participated voluntarily in the project. Anonymity and confidentiality were assured.

These subjects formed three groups. Group 1 was composed of nurses from five medical and surgical units on the 12-hour shift. Typically, their 12-hour schedule consisted of two to three days on duty, alternating with two to three days off duty, and every second weekend off. Units in Group 1 had adopted the 12-hour shift more than a year prior to the study period; none of the staff had requested a return to the 8-hour shift. Group 2 included nurses from seven medical and surgical units on the 8-hour shift. Their schedule routinely provided for staff to have every third weekend off, but they might work as long as seven days consecutively. The nursing units in Group 2 had been on this 8-hour shift for some time and staff had not requested a change to the 12-hour shift. These two groups are defined as having an established shift.

Group 3 consisted of nursing staff from four units on the 8-hour shift who had requested a change to the 12-hour shift. This group is defined as having an unestablished shift. Two of these units were medical, one was medical-surgical, and the fourth, an obstetrics and gynecology unit, was included because a larger sample size was favoured over possible differences attributable to work settings or technology. The 8-hour schedules for Group 3 are similar to those of Group 2.

The rationale for the division of staff working 8-hour shifts into Groups 2 and 3 was as follows. First, it did not seem that an equitable comparison of 8- and 12-hour shifts could be made when one group consisted only of units apparently satisfied with their shift and the other group consisted of units holding a conflicting view about their hours of work. Secondly, a recognition of two groups with different satisfactions permitted measurement of the effect of the decision regarding the changeover request

on the well-being of the units. This changeover decision determined the timing of the data collection.

Measures

Well-being was measured by the Work Environment Survey (WES). This survey consisted of two complete questionnaires: the *Worker Opinion Survey* (Cross, 1973), referred to as the Employee Opinion Survey, or EOS, in this study; and the *General Health Questionnaire* (Goldberg, 1972). Questions taken from studies by the Quality of Life Study Group (1978) and by Tasto et al. (1978) were also used. Four questions, designed by the author, were added. These items were not pretested and were not included in the total scores.

The WES consists of five sections, the first of which encompasses job satisfaction (the EOS). Measures for this section provided for a total score as well as subsection scores on: EOS 1 – the organization as a whole, EOS 2 – pay, EOS 3 – opportunities for promotion, EOS 4 – the job itself, EOS 5 – the immediate superior, and EOS 6 – the people with whom the respondent works. This section has seven variables.

In the second section the respondent was asked to rate various aspects of her work and off-work environments, using a 0 – 10 scale. These same questions were repeated in the fourth section, but were phrased to elicit the desired rather than the actual situations. The absolute difference between the two scores for each item provides measures for the Quality of Work Life (QWL) or the Quality of Social Life (QSL). This section has 35 variables.

The third section focuses on the subject's rating of: her general health; her use of drugs (including her use of pain killers, caffeinated beverages, cigarettes, and alcohol); her eating patterns; her sleeping patterns; and her mental well-being (MWB). This section has 41 variables.

Questions in the fifth and final section of this survey gather socio-demographic data on the subject's age, living arrangement, child care responsibilities, hours of work, and choice of clinical area.

Internal reliability coefficients on the *Worker Opinion Survey* subscales range from .69 to .84 on the female population tested. While no test-retest reliability coefficients are given in the literature, Cross (1973) indicates that test-retest reliability is likely to reach acceptable levels, "in view of the high degree of internal consistency" (p. 200). There is some evidence of construct validity. When the total and subscores were correlated with a Hoppock-type global measure of job satisfaction, the total score had a correlation coefficient of .58. The highest correlation was for "the job itself" (.63).

Evidence about the concurrent validity of the subsamples was obtained from a subsample of women who were also interviewed (Cross, 1973, pp. 201-202). The *General Health Questionnaire* was shown to have a test-retest reliability of .77 on outpatients and .53 on doctors. The split-half reliability was .92. Concurrent validity was obtained in the United States (.80 in greater Philadelphia) and in Great Britain (.72 at St. Thomas Hospital, London). No reliability or validity data were available for the other portions of the survey.

Procedure

The initial data collection for baseline data on Groups 1, 2, and 3 occurred after all of the units had been on their respective schedules for over a year (see Figure 1). It was also after the four units in Group 3 had requested a changeover to the 12-hour shift. A second and final data collection for all groups was initiated four and a half months later, two weeks after the changeover request was denied. The same questionnaire was used at both times. Participant recall was not considered to be a problem because of the questionnaire format and time span. To control for biased response set, staff were not told that the data would be used to compare 8- and 12-hour shifts.

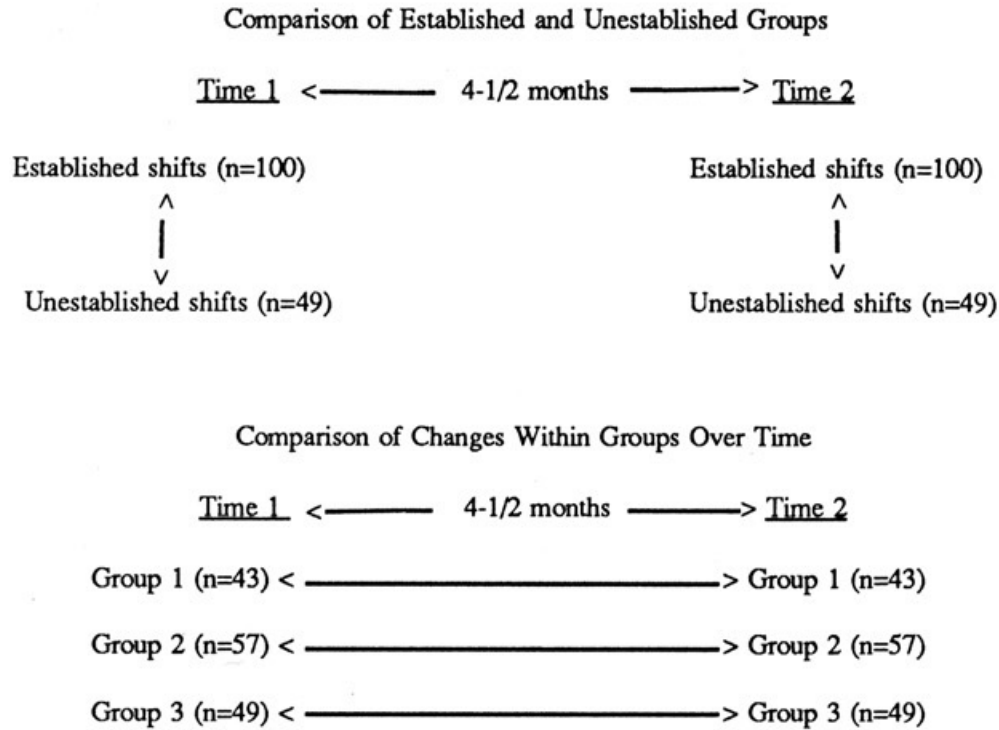


Figure 1: Study Design

Table 1

*Means and Standard Errors for the Job Satisfaction (EOS) Variables, the Quality of Work Life (QWL) Total and the Mental Well-being (MWB) Score for Groups 1, 2, and 3 at Times 1 and 2**

TIME 1									
		Group 1		Group 2			Group 3		
Variables	n	Mean	SE	n	Mean	SE	n	Mean	SE
EOS 1	42	11.33	.98	55	10.53	.87	49	9.80	.83
EOS 2	42	6.81	.94	56	4.55	.68	49	3.61	.76
EOS 3	42	10.52	.82	56	9.71	.79	49	8.86	.84
EOS 4	42	20.19	.47	56	17.71	.67	49	19.16	.65
EOS 5	42	19.95	.79	56	19.77	.65	49	20.14	.65
EOS 6	42	21.05	.56	56	20.57	.55	49	22.80	.30
EOS total	41	89.37	2.64	55	82.89	2.57	49	84.37	2.45
QWL total	42	25.45	1.24	55	28.53	1.26	47	29.15	1.53
MWB score	43	49.63	1.40	56	53.14	1.43	47	52.28	1.28

TIME 2									
		Group 1		Group 2			Group 3		
Variables	n	Mean	SE	n	Mean	SE	n	Mean	SE
EOS 1	42	8.64	.88	53	10.57	.83	49	8.63	.69
EOS 2	40	3.60	.65	53	4.36	.66	47	4.28	.81
EOS 3	43	8.98	.79	51	8.73	.83	48	7.50	.84
EOS 4	42	18.55	.73	54	18.65	.81	49	18.37	.62
EOS 5	43	17.19	1.13	53	19.00	.83	49	19.96	.66
EOS 6	43	22.19	.44	55	20.04	.62	48	22.13	.49
EOS total	39	79.15	2.78	48	82.06	3.03	45	80.20	2.35
QWL total	43	27.61	1.47	55	26.66	1.21	46	26.09	1.33
MWB score	42	52.14	1.39	54	53.15	1.53	49	54.33	1.59

*The possible ranges of the scores are: EOS variables, 0 to 24; EOS total, 0 to 144; QWL total, 0 to 130; MWB score, 30 to 120.

In order to obtain a more accurate measure of change, the respondents' questionnaires for the two data collections were paired. Each head nurse kept a list which matched the respondent's name to a questionnaire number. For the second data collection she was sent questionnaires with the same

numbers to distribute according to her list. This list was then destroyed. Completed questionnaires were sent directly to the researcher in a sealed envelope, thus assuring anonymity.

Initially, a total of 273 questionnaires was given to staff nurses; 228 were returned, a response rate of 84%.

At the time of the second data collection only 202 of the original respondents were available: 155 replied, a response rate of 77%. As six of these questionnaires could not be used, the total number of questionnaires in the final analysis was 149 (Group 1 = 43, Group 2 = 57, and Group 3 = 49). Of these respondents, 61% were aged 29 or less, 68% were living with a partner, and 74% did not have children.

Table 2

Results of Paired t Test Comparing Times 1 and 2 on Selected Variables from the Work Environment Survey for Groups 1, 2 and 3

Variables	Group 1			Group 2			Group 3		
	n	T	p*	n	T	p*	n	T	p**
EOS 1	42	2.72	.01	52	.20	.84	49	1.56	.07
EOS 2	39	2.45	.02	52	.63	.53	47	-.93	.18
EOS 3	42	1.69	.10	50	.66	.52	48	2.10	.02
EOS 4	40	2.32	.03	53	-.92	.36	49	1.14	.13
EOS 5	42	2.91	.01	52	1.07	.29	49	.27	.40
EOS 6	42	-2.03	.05	54	1.01	.32	48	1.70	.05
EOS total	38	3.31	.00	47	.67	.51	45	2.03	.03
QWL total	41	-1.44	.16	53	1.10	.28	45	2.41	.01
MWB score	42	-1.94	.06	54	-.11	.91	47	-1.28	.11

p* values given are for two-tailed probability.

p** values given are for one-tailed probability.

The data obtained from the WES were analyzed to compare differences in well-being among Groups 1, 2, and 3 at the two points in time. Tables 1 and 2 show the results of selected items. These analyses were to detect differences between the established 8- and 12-hour shifts as well as to determine whether the effects of schedule dissatisfaction and subsequent request denial differentiated Group 3 from the other two groups. Analysis of

variance was carried out on responses to questions having continuous variables: the EOS, QWL, and QSL items, as well as 23 of the items in the general health section. Discrete variables, the remaining 18 items in the general health section, were analyzed by cross-tabulation, using a chi-square test of significance. A two-tailed, paired t test was used to compare Groups 1 and 2 between the two data collection periods, for selected measures. It was assumed that these two groups would not change over time.

In the same manner, Group 3 was examined. However, a one-tailed, paired t test was used, as a decrease in well-being was expected to occur due to the denial of this group's request.

For all tests of significance, alpha was set at 0.05.

Results

Research Question 1: Are there any differences between the groups with established 8- and 12- hour shifts?

A total of 83 variables were each compared at two points in time (i.e., 166 statistical tests). The significant variables were not abundant in any cluster and there were only four at Time 1 and four at Time 2; that is, about the number expected by chance. It is indirectly inferred, therefore, that no significant difference exists between the groups with established 8- and 12-hour shifts.

Research Question 2: Do the groups with an established shift exhibit greater well-being than the groups with an unestablished shift?

To answer this question, Groups 1 and 2 were combined and compared with Group 3, the staff who had requested the changeover. The difference in size between the two comparison groups was taken into consideration in the statistical analysis. Of the 83 variables compared at the two times, only four were significant at Time 1 and two were significant at Time 2. These results indicated that, overall, there does not appear to be any difference between the established and unestablished shift groups in any of the clusters of variables.

Research Question 3: Do the groups with an established shift change over time?

Group 1, the 12-hour shift, showed a significant difference over time in total job satisfaction. Group 2 showed no significant difference in any of the job satisfaction variables. The only significant difference found in this group was from the general health section – the number of days that staff took off work because they were "just not feeling well."

Research Question 4: Does denial of the request for changeover result in decreased well-being in Group 3?

Like Group 2, the number of staff in Group 3 who took a day off work because they were "just not feeling well" increased significantly. Group 3 members also indicated that they had less opportunity for promotion, were less satisfied with their co-workers and their job, but that their Quality of Work Life had improved over time. This apparent contradiction between QWL and job satisfaction appears to be attributable to a lowering of work expectations (the "desired" score).

The results for these four research questions indicated whether the WES scores differed between groups or changed over time. The overall ratings, based on the total sample response, indicated that the nurses who completed the WES showed much dissatisfaction with their job, especially with regard to the organization, opportunities for promotion and pay.

In the QWL subsections, the items that showed the greatest disparity were: participation in job decisions, amount of salary, opportunities for promotion, credit for work and the organization's reputation in the community.

The similarity between the job satisfaction and QWL results emphasizes that staff rate some of their working conditions as poor; moreover, the intensity of their feelings about these same conditions is high.

Discussion

Shift differences

The results of Research Question 1 showed no significant difference between 8- and 12-hour shifts and well-being. It appears that there is only a difference in worker preference. As the many differing variables between studies precluded detailed comparison, some general comments are offered.

This study is in agreement with the three previous Canadian studies in that it concludes, from the results, that there appear to be no contraindications for the use of 12-hour shifts. The overall absence of negative effects associated with the 12-hour shift supports the implementation of such a schedule where staff demand for it is great. However, the effect of the 12-hour shift on certain groups (e.g., working mothers) should be more fully explored.

The finding that there was no overall significant difference in job satisfaction is broadly consistent with that of Eaton and Gottsleig (1980)

and Stinson and Hazlett (1975), but contradicts Hibberd's (1973) finding that there was lower satisfaction in the 12-hour shift groups. As the finding that there was a significant difference between groups occurred in the pretest phase as well as the experimental phase of her study, the interpretation that these results related to shift differences is questionable.

Although the other two studies found no differences in work satisfaction, nursing staff in both studies wished to continue with the 12-hour shift. Mills, Arnold and Wood (1983) and Niemer and Healy (Price, Niemer & Healy, 1984) emphasize the value of the method of implementation (i.e., preplanning, staff involvement, and continual evaluation and modification) in gaining acceptance of a change in shift schedules. Price's (Price et al., 1984) example of the lack of success of a 12-hour shift that was imposed upon staff underscores this point.

The writer's study did not ask for shift preference, but used job satisfaction as an important measure of shift satisfaction. Wedderburn (1967) distinguishes between these variables by relating shift satisfaction to family and social life, and job satisfaction to working conditions. Therefore, an alternative approach would be to evaluate shift work by its effect on family and social life.

Change over time

For Group 1, job satisfaction decreased significantly over time, while in Group 2, sickness absence increased significantly. Either of these findings might be a result of growing annoyance with the lack of settlement in the nurses' contract under negotiation at the time.

In Group 3, the significant change that occurred in job satisfaction, QWL, and sickness absence might have been attributable either to nonsettlement of the nurses' contract or to the denial of the changeover request. If the former was the case, the variables affected should be the same for all three groups. It should be noted, however, that the 12-hour group was the only one that did not show a significant increase in sickness absence. If illness, which could not be controlled, had actually increased at Time 2, the 12-hour group would be less likely to be ill on a work day as they have a higher ratio of days off to days worked than the 8-hour groups. If the latter was true, the reaction was rather weak unless Group 3 members over the ensuing months, had come to expect that their request would be denied, or their feelings about the nonsettlement of their contract overshadowed their feelings about the request denial.

Quality of Work Life

The QWL scale, which measures the disparity between the existing and desired work situation, indicated that opportunities for promotion, participation in job decisions and credit for work were three of the areas of greatest concern. The disparity regarding opportunities for promotion is serious in light of the concern being expressed over nursing recruitment and the emphasis on nurses obtaining a baccalaureate degree (Alberta Hospital Association, 1980). The importance of allowing staff to participate in decisions concerning their work and of acknowledging work well done cannot be overemphasized.

Limitations

The data were collected using a convenience sample, thus limiting the generalization of results. As the WES lacks test-retest reliability, one is unable to determine whether any change in scores is attributable to unstable traits or to an attitudinal change on the part of the respondents. This is a fairly serious problem as it undermines the confidence that can be placed in the findings. Data from this study were not stratified to compare the respondents on the basis of their age, living arrangement or child care responsibilities. Such stratification, based on a larger sample size, may have shown different outcomes for different socio-demographic groups. The same reservation applies to the effect of these shifts on different types of nursing units, as the pace, type and technology of work areas are variable.

In summary, this study suggests no significant difference between the 8- and 12-hour shifts in terms of well-being of the staff nurse. Shift work, however, is only one aspect of the work environment, not a substitute for good working conditions. The results of this survey indicate that there are other equally important aspects needing attention. Providing nurses with increased participation in job decisions, more credit for their work and greater opportunity to utilize their capabilities also may do much to improve the quality of their work life.

This study was carried out while the first author was a Master's student in the Department of Community Health Sciences, The University of Calgary. It was supported by the National Health Research and Development Program of Canada (Award Number 6609-114-47). The authors thank Margaret Munro and Marlene Reimer for their helpful suggestions during the preparation of this article. Copies of the Work Environment Survey are available, upon request, with a self-addressed, stamped envelope, from: E. Jennings, 819 15th Street N.W., Calgary, Alberta, T2N 2B3.

REFERENCES

- Åkerstedt, T., Fröberg, J., Levi, L., Torsvall, L., & Zamore, C. (1977, September). *Shift work and well-being* (No. 63b). Stockholm: Karolinska Institute, The Laboratory for Clinical Stress Research.
- Alberta Hospital Association. (1980, November). *Nursing manpower: A study of factors in nursing supply and demand in Alberta hospitals and nursing homes*. Edmonton, Alberta: Author.
- Charles, N., & Brown, D. (1981). Women, shiftwork and the sexual division of labour. *Sociological Review*, 29, 685-704.
- Colligan, M. (1980). Methodological and practical issues related to shiftwork research. *Journal of Occupational Medicine*, 22(3), 163-166.
- Cross, D. (1973). The Worker Opinion Survey: A measure of shop-floor satisfaction. *Journal of Occupational Psychology*, 47, 193-208.
- Cunningham, J.B. (1982). Compressed shift schedules: Altering the relationship between work and non-work. *Public Administration Review*, 42, 438-447.
- Eaton, P., & Gottsleig, S. (1980). Effects of longer hours, shorter week for intensive care nurses. *Nursing Outlook*, 32(4), 193-6.
- Finn, P. (1981, October). The effects of shift work on the lives of employees. *Monthly Labour Review*, 104, 31-35.
- Goldberg, D.P. (1972). *The detection of psychiatric illness by questionnaire: A technique for the identification and assessment of non-psychotic psychiatric illness*. London: Oxford University Press.
- Harrington, J.M. (1978). *Shift work and health: A critical review of the literature*. London: Her Majesty's Stationery Office.
- Hellreigel, D. (1972). The four-day work week: A review and assessment. *Michigan State University Business Topics*, 20, 39-48.
- Hibberd, J. (1973, January). 12-hour shifts for staff: A field experiment. *Hospital Administration in Canada*, 26-30.
- Maurice, M. (1975). *Shiftwork: Economic advantages and social costs*. Geneva: International Labour Office.
- McGillick, K. (1983). Modifying schedules makes jobs more satisfying. *Nursing Management*, 14(12), 53-55.
- Mills, M.E., Arnold, B., & Wood, C.M. (1983). Core-12: A controlled study of the impact of 12-hour scheduling. *Nursing Research*, 32, 356-361.
- Nord, W., & Costigan, R. (1973). Worker adjustment to the four-day work week: A longitudinal study. *Journal of Applied Psychology*, 58, 60-66.
- Quality of Life Study Group. (1978). *Quality of life in Saskatchewan*. Saskatoon: The University of Saskatchewan: Author.
- Price, C.A., Niemeier, D.F., & Healy, S.A. (1984). The 12-hour shift: Is it viable? *Nursing Outlook*, 32, 193-196.
- Staines, G.L., & Pleck, J.H. (1984). Nonstandard work schedules and family life. *Journal of Applied Psychology*, 69, 515-523.
- Stinson, S., & Hazlett, C. (1975). Nurse and physician opinion of a modified work week trial. *Journal of Nursing Administration*, 5 (7), 26-30.

- Swimmer, D. (1974). Recent experience with the three or four day work week. In S.M.A. Hameed & G.S. Paul (Eds.), *Three or four day work week* (pp. 113-126). Edmonton: The University of Alberta, Faculty of Business Administration.
- Tasto, D.L., Colligan, M.J., Skjei, E.W., & Polly, S.J. (1978). *Health consequences of shift work* (DHEW [NIOSH] Publication No. 78-154). Washington, DC: US Government Printing Office.
- Thiis-Evensen, E. (1958). Shiftwork and health. *Industrial Medicine*, 27, 493-497.
- Wedderburn, A.A. (1967). Social factors in satisfaction with swiftly rotating shifts. *Occupational Psychology*, 41(2-3), 85-107.
- Wojtczak-Jarowzowa, J. (1978). *Physiological and psychological aspects of night and shift work* (DHEW [NIOSH] Publication No. 78-113). Washington, DC: US Government Printing Office.

RÉSUMÉ

Quarts de 8 et de 12 heures en service hospitalier: effets sur le bien-être des infirmières

Une étude sur les effets des quarts de 8 et de 12 heures a fait l'objet principal de la présente recherche. On a mesuré le bien-être au moyen d'un questionnaire qui portait sur la satisfaction au travail, les habitudes d'alimentation et de sommeil, la fatigue et le bien-être mental. On a aussi demandé aux sujets d'évaluer les aspects de leur travail et les milieux hors du travail selon leur perception et leurs désirs. Les sujets, des infirmières permanentes à temps partiel et à temps plein de 16 unités d'un grand hôpital d'enseignement métropolitain, ont été divisés en trois groupes: (a) des infirmières travaillant par quarts de 12 heures; (b) des infirmières travaillant par quarts de 8 heures; et (c) des infirmières qui avaient demandé que le quart de 8 heures passe à 12 dans leur unité. Le questionnaire a été donné deux fois. La seconde collecte de données a été effectuée environ deux semaines après le refus de la demande de changement du troisième groupe. Les deux questionnaires remplis par chaque répondant ont été appariés et les réponses de 149 infirmières ont servi à des analyses comparatives. La comparaison des trois groupes n'a indiqué aucune différence du bien-être entre les postes de 8 et de 12 heures ni entre ces deux groupes et le groupe ayant subi un refus de changement. Les résultats, cependant, ont indiqué un besoin d'amélioration du milieu de travail dans les domaines tels que la participation aux prises de décisions au travail, les occasions d'avancement et le mérite.