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**Satisfied Workers, Retained Workers:
Effects of Work and Work Environment on Homecare
Workers' Job Satisfaction, Stress, Physical Health,
and Retention**

**Isik U. Zeytinoglu
Margaret Denton**

SEDAP Research Paper No. 166

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December 2006

The Program for Research on Social and Economic Dimensions of an Aging Population (SEDAP) is an interdisciplinary research program centred at McMaster University with co-investigators at seventeen other universities in Canada and abroad. The SEDAP Research Paper series provides a vehicle for distributing the results of studies undertaken by those associated with the program. Authors take full responsibility for all expressions of opinion. SEDAP has been supported by the Social Sciences and Humanities Research Council since 1999, under the terms of its Major Collaborative Research Initiatives Program. Additional financial or other support is provided by the Canadian Institute for Health Information, the Canadian Institute of Actuaries, Citizenship and Immigration Canada, Indian and Northern Affairs Canada, ICES: Institute for Clinical Evaluative Sciences, IZA: Forschungsinstitut zur Zukunft der Arbeit GmbH (Institute for the Study of Labour), SFI: The Danish National Institute of Social Research, Social Development Canada, Statistics Canada, and participating universities in Canada (McMaster, Calgary, Carleton, Memorial, Montréal, New Brunswick, Queen's, Regina, Toronto, UBC, Victoria, Waterloo, Western, and York) and abroad (Copenhagen, New South Wales, University College London).

This paper is cross-classified as No. 412 in the McMaster University QSEP Research Report Series.

**Satisfied Workers, Retained Workers:
Effects of Work and Work Environment on Homecare Workers' Job Satisfaction, Stress,
Physical Health, and Retention**

By

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Note: This report appears also on the website of the Canadian Health Services Research Foundation, http://chsr.ca/final_research/ogc/index_e.php

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Acknowledgements:

The research team wishes to acknowledge the following:

Funders

Canadian Health Services Research Foundation (CHSRF), Ontario Ministry of Health and Long-Term Care (OMHLTC), Community Care Research Centre (CCRC), and Social and Economic Dimensions of an Aging Population II (SEDAP II) Research Program

Research Partners

Community Care Access Centre, Hamilton; VON, Hamilton-Wentworth Branch; St. Joe's Home Care (previously SEN Community Health Care); Bayshore Health Care; Care Plus; ComCare; Saint Elizabeth Health Care; OPSEU Local 269; CUPE Local 4800; OPSEU Local 274; Therapy Health Care; Community Rehab; Therapy Specialties; ONA (at St. Joe's Home Care)

Participants in the Research

The home support workers, nurses, therapists, office staff, case managers, supervisors, coordinators, and managers participating in our focus groups, key informant interviews, and responding to our survey

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Abstract

The goal of this project was to assist health system managers and policy makers develop policies and strategies to recruit and retain human resources in the homecare sector and have a satisfied, healthy workforce. The overall research question was: *How do the work characteristics of homecare workers and the work environment in homecare contribute to job satisfaction, stress, physical health, and retention?*

The research is designed as a mixed-method approach with both qualitative and quantitative data. Results showed that restructuring and organizational change in the homecare sector has contributed to both mental and physical health problems (including job stress and musculoskeletal disorders), job dissatisfaction, and retention problems. Factors that contribute to higher levels of satisfaction and the propensity to stay with the organization include organizational and peer support, working one-on-one with clients, doing emotional labour (that is, the work involved in dealing with other people's feelings), and satisfaction with schedules, pay, and benefits. This study also examined the association between job flexibility and job insecurity and self-reported musculoskeletal disorders and found no relationship between these variables and musculoskeletal disorders.

Key words: Home care workers, job satisfaction, retention

JEL Classification: I11; J22

Résumé

Le présent projet avait pour but d'aider les gestionnaires et les responsables de politiques du système de santé à élaborer des politiques et des stratégies visant, d'une part, à recruter et à conserver les ressources humaines dans le secteur des foyers pour aînés et, d'autre part, à disposer d'une main-d'œuvre satisfaite et en santé. Globalement, l'étude visait à répondre à la question suivante : *Quelle incidence l'environnement de travail du personnel des foyers pour aînés et les caractéristiques de ce secteur d'activités ont-ils sur la satisfaction professionnelle, le stress vécu par les employés, leur santé physique et leur désir de rester en emploi?*

Dans le cadre de notre étude, nous avons utilisé une méthode mixte qui faisait appel à des données qualitatives et quantitatives. L'étude démontre que la restructuration et les changements organisationnels opérés dans le secteur des foyers pour aînés ont contribué à l'apparition des troubles de santé physique et mentale (notamment le stress professionnel et les troubles musculosquelettiques), de l'insatisfaction au travail et des problèmes de rétention. Parmi les facteurs qui contribuent à rehausser le niveau de satisfaction et la tendance à rester en emploi on peut nommer : le soutien de l'organisme et des pairs, le travail individuel avec les clients, le travail émotionnel (c'est-à-dire, l'intervention sur la vie émotionnelle d'autrui), et la satisfaction vis-à-vis de l'horaire, de la rémunération et des avantages sociaux. Nous avons également étudié l'association qui existe entre, d'une part, la flexibilité en matière d'emploi et la précarité de l'emploi et, d'autre part, les troubles musculosquelettiques signalés par le personnel. Si nous avons constaté que le stress constitue une source importante de problèmes musculosquelettiques, nous n'avons par contre établi aucune relation entre ce type de problèmes et le fait d'avoir un emploi de type flexible (temps partiel ou occasionnel), un horaire souple et de vivre une situation précaire d'emploi.

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Key Implications for Decision Makers

- Occupational health problems of stress, burnout, and musculoskeletal disorders experienced by workers in this study are preventable. Sufficient government funding to provide services, avoid continuous changes in the work environment, and make rational restructuring decisions based on input from all stakeholders can contribute to healthier workplaces and healthy workers.
- Stress, high workload, and job insecurity are factors that contribute to decreased job satisfaction among homecare workers. Experiencing emotional labour (that is, the work involved in dealing with other people's feelings), satisfaction with pay and work schedules, feelings of organizational and co-worker support, working one-on-one with clients, and high levels of mastery contribute to increased job satisfaction.
- The implementation of market-based or managed competition increased the turnover rate for homecare workers in our study agencies. The casualization of work, low pay, poor benefits, and job insecurity are the reasons given by homecare workers for leaving their agencies. To decrease high turnover in the homecare sector, governments need to divert sufficient resources to the homecare sector so jobs may be restructured to be full-time with good pay and benefits matching those provided by long-term care institutions and hospitals and so workers can have continuity in hours, schedules, and place of work.
- Increased stress is significantly associated with self-reported musculoskeletal disorders. Policy makers are recommended to focus on factors that create stress in order to have a healthy working population in homecare and to retain these workers in the labour force.

- **Executive Summary**

The goal of this project was to assist health system managers and policy makers develop policies and strategies to recruit and retain human resources in the homecare sector and have a satisfied, healthy workforce. Researchers worked in partnership with the agencies and the unions representing workers in the agencies to examine the effects of work and work environments on homecare workers' emotional, mental, and physical health and intention to leave their workplaces.

The overall research question was: *How do the work characteristics of homecare workers and the work environment in homecare contribute to job satisfaction, stress, physical health, and retention?* The factors we examined were job characteristics (non-standard work, flexible work, flexible pay, and flexible work schedules), physical and psychosocial work factors (physical work environment, heavy workload, work intensification, job insecurity, and social support), and factors related to organizational change (restructuring and perceived impact on clients). More specifically, we explored the impact of these factors on employee and organizational outcomes.

The project had two phases. In the first phase of this study (reported elsewhere) we examined the impact of healthcare restructuring and other organizational changes on the mental and physical health of homecare workers. In the second phase, we focused on a set of factors affecting employee and organizational outcomes. Employee outcomes are represented as job satisfaction, stress, physical health problems, and musculoskeletal disorders. Retention is the organizational outcome and refers to the workers' intention to leave and, for those who have already left their reasons for leaving and reasons for getting a different job.

The research is designed as a mixed-method approach with both qualitative and quantitative data. We collected the data under a previous grant from the Workplace Safety and

Insurance Board. For the qualitative data we used interviews and discussion groups, and for the quantitative data we used the “Health and Worklife Questionnaire” (a survey of all workers) and the “Survey of Former Employees.” This triangulation of data collection gives us a more in-depth, comprehensive picture of the study findings.

Results showed that restructuring and organizational change in the homecare sector has contributed to both mental and physical health problems (including job stress and musculoskeletal disorders), job dissatisfaction, and retention problems. The study provided convincing evidence that the change to a market-based model of homecare, known locally as “managed competition,” and the corresponding shift to a business-like work environment is taking a toll on homecare workers. Other factors that contribute to these problems are the lack of resources in the homecare sector; government budget cuts; dissatisfaction with hours of work, levels of pay, and benefits; wage inequalities compared to the hospital and nursing home sectors; work intensification; and perceived decline in the quality of care given to clients. The study shows that there are differences in working condition between non-profit and for-profit agencies in terms of pay, benefits, and continuity of hours, yet for-profit visiting homecare workers seem to have experienced fewer impacts of healthcare restructuring than their non-profit counterparts.

Factors that contribute to higher levels of satisfaction and the propensity to stay with the organization include organizational and peer support, working one-on-one with clients, doing emotional labour (that is, the work involved in dealing with other people’s feelings), and satisfaction with schedules, pay, and benefits. This study also addressed the association between job flexibility and job insecurity and self-reported musculoskeletal disorders. While stress was identified as an important source of musculoskeletal disorders, we found no relationship between

having a flexible type of job (working part-time or casual), having a flexible schedule, job insecurity, and musculoskeletal disorders.

There are several implications of our study for managers, unions, and policy makers. Our findings show the work and work environment are major factors affecting worker and workplace outcomes. Occupational health problems experienced by workers in this study are preventable.

Managers and unions are recommended to pay attention to the negative effects of stress, workload, and job insecurity on job satisfaction. Further, they are recommended to pay attention to the positive effects of experiencing emotional labour, satisfaction with pay and work schedules, organizational and co-worker support, and working one-on-one with clients on job satisfaction. High levels of mastery also positively affect job satisfaction.

It is important for policy makers to acknowledge occupational stress resulting from incremental changes in the work and external work environment, and the resulting effects on physical health, work-related stress, job dissatisfaction, and propensity to leave the workplace. Sufficient government funding to provide services, avoiding continuous changes in the work environment, and making rational restructuring decisions based on input from all stakeholders can contribute to healthier workplaces and healthy workers. In addition, providing resources in homecare to provide more permanent jobs with wages and benefits that match the acute and long-term care system will help to improve retention and recruitment in the homecare sector.

Context

Healthcare is one of the most labour-intensive sectors in the Canadian economy. Health sector human resources issues, and within that homecare sector human resources issues, have not been studied extensively (Koehoorn et al. 2002). With staff shortages, sector restructuring, and budgetary restrictions, managing in healthcare has become more difficult than ever. There are a large number of healthcare workers employed on a part-time and contract basis, and unions and employers seek information about the needs of this growing number of workers (Koehoorn et al. 2002).

Good-quality healthcare is largely dependent on the quality of staff delivering the services. It is well-known in the human resources field that satisfied workers are more productive and efficient, are happier, and provide better quality services. They also stay with their employers longer. The importance of recruitment and retention of workers in the home healthcare sector has been a topic of discussion in the last few years both by policy makers and health sector managers. At the national level, the Romanow commission (2002a, 2002b) highlighted the crisis in health sector human resources. Studies by Human Resource Development Canada (2003a, b, and c) discussed a number of issues in health human resources in Canada, and the Caplan report (2004) detailed the human resource issues in homecare in Ontario. Increasing levels of stress, burnout problems, and job dissatisfaction coupled with physical health problems are common among homecare workers. The demand for staff is high while supply of staff is not sufficient. At the local level, the Community Care Research Center Roundtable (2002) in Hamilton showed human resources as one of six priority research areas for the local homecare sector.

Researchers worked in partnership with the agencies and the unions representing workers in the agencies in Hamilton to examine the effects of work and work environments on homecare workers' emotional, mental, and physical health and intention to leave their workplaces. The goal of this research was to assist health system managers and policy makers to develop policies and strategies to recruit and retain human resources in the homecare sector and have a satisfied, healthy workforce. The overall research question is: *How do the work characteristics of homecare workers and the work environment in homecare contribute to job satisfaction, stress, physical health, and retention?*

Implications

There are implications of this study for the managers and unions as well as the policy makers.

Managers and Unions — Findings provide evidence on workers' emotional, mental, and physical health problems, job satisfaction, turnover, and intentions to leave homecare. Our findings show the work and work environment are major factors affecting worker and workplace outcomes. Managers and unions are recommended to pay closer attention to these factors in their attempts to improve job satisfaction and retention of homecare workers.

Workers reported high levels of stress, burnout, and physical health problems such as musculoskeletal disorders. In the first phase of this study we showed that many of these illnesses were related to organizational change and restructuring in the work environments. Occupational health problems experienced by workers in this study are preventable. It is important to acknowledge that occupational stress results from incremental changes in the work and external work environment, and the resulting effects on physical health, job dissatisfaction, absenteeism,

and propensity to leave the workplace. Avoiding continuous changes in the work environment and making rational restructuring decisions based on input from all stakeholders can contribute to healthier workplaces and healthy workers.

Occupation-specific analysis of job satisfaction showed that different factors affect job satisfaction of each occupational group. In particular, managers and unions are recommended to pay attention to the negative effects of stress, workload, and job insecurity on job satisfaction. They are also recommended to pay attention to the positive effects of experiencing emotional labour (that is, the labour involved in dealing with other people's feelings), satisfaction with pay and work schedules, organizational and co-worker support, and working one-on-one with clients on job satisfaction. High levels of mastery also positively affect job satisfaction.

Policy Makers — It is important to understand the impact of work and work environments affecting workers and agencies/unions so policy decisions can result in better working conditions for homecare workers. As our results show, better work environments benefit both workers and clients. Healthy work environments and supportive organizations and co-workers lead to lower administrative and human costs associated with mental and physical health problems and retention. Findings from this study have implications for policy at the agency and union levels but, more importantly, at the government level, which is the main source of workplace and work environment changes. The work environment in the homecare sector over the last decade has changed so much and at such a rapid rate, the implications of these changes on employees have been detrimental to their health. Our results show that at present homecare workers are overworked, stressed, and have little job security.

In addition, the implementation of market-based or managed competition increased the turnover rate for homecare workers in our study agencies. First, turnover rates increased

dramatically when agencies lost contracts because their tenders were unsuccessful. Second, the marketization of homecare led to an intensification of work, to the causalization of work, and to lower pay, poorer benefits, and less job security. These changes were reflected in the reasons given by homecare workers for leaving their agencies.

To stop high turnover in the homecare sector, governments need to divert sufficient resources to the homecare sector so that jobs may be restructured to be full-time employment with good pay and benefits that match those provided by long-term care institutions and hospitals and workers can have continuity in hours, schedules, and place of work.

There seems to be a high percentage of workers in part-time and casual jobs among visiting workers. Many have flexible schedules. And, there is a high level of perceived job insecurity. In terms of physical health problems, these factors are not directly associated with musculoskeletal disorders, but they do affect physical health through the stress they create in the work environment. Our results showed that increased stress is significantly associated with self-reported musculoskeletal disorders. Policy makers are recommended to focus on factors that create stress to have a healthy working population in homecare and to retain these workers in the labour force.

These findings can contribute to policy changes that can improve the physical and mental health of homecare workers, create healthy working conditions, lower stress levels, and increase job satisfaction. The results suggest the factors policy makers can take into consideration in employee retention.

Approach

This project had two phases. The objective of the first phase was to study the impact of healthcare restructuring and other organizational changes on the mental and physical health of homecare workers. That part of the study was funded by the Workplace Safety and Insurance Board of Ontario. This second phase of the project builds upon the first phase and concerns issues relating to the work environment, focusing on non-standard and flexible work arrangements, flexible work schedules, flexibility in pay and benefits, flexibility in working time (including overtime), scheduling, and training issues. We also followed workers who left their agencies (since our 1996 survey) and asked questions on their reasons for leaving and taking the new job, comparing homecare jobs to all other jobs since then.

The conceptual model that our project is based on is presented in Figure 1. This conceptual model and the research questions are based on the extensive literature reviewed (including Armstrong et al. 2000; Aronson and Neysmith 1996; Cooper et al. 2001; Lowry 2002; CARP 1999; Koehoorn et al. 2002; Messing 1998; Quinlan et al. 2001) and the research findings of the two principal investigators (Denton et al. 1999a; Denton et al. 1999b; Denton, et al. 2002a; Denton et al. 2002b; Zeytinoglu 1999; Zeytinoglu 2002; Zeytinoglu et al. 1999; Zeytinoglu et al. 2000; Zeytinoglu et al. 2002). In this model we focus on a set of factors affecting employee and organizational outcomes. Employee outcomes are represented as job satisfaction, stress, physical health problems, and musculoskeletal disorders.

Retention is the organizational outcome and refers to the workers' intention to leave and, for those who have already left, their reasons for leaving and reasons for getting a different job. Retention and turnover are opposite sides of the same coin, affected by the same factors, with positive effects of these factors contributing to retention and negative effects contributing to

turnover decisions. For example, job satisfaction contributes to retention and job dissatisfaction contributes to turnover decisions. Mobley (1977) and Mobley et al.(1979) first showed how job dissatisfaction leads to thoughts about quitting and leaving the organization (turnover), or conversely how job satisfaction contributes to the decision to stay with the organization (retention). Management research following this theorizing showed job satisfaction as one of the major factors affecting an individual's decision to stay (retention) with the organization (Bloom et al. 1992; Hom and Griffeth 1991, Hom and Kinicki 2001, Griffeth et al. 2000, Lee et al. 1999). This knowledge led managers to focus on employees' job satisfaction as one of the key factors to retain valued employees.

A number of factors from people's work environments and their personal lives affect their decision to stay with the organization. As we present in our model, factors influencing retention are grouped into job characteristics, physical and psychosocial work factors, organizational change, and individual characteristics. These factors affect employee outcomes, which in turn affects retention. Among these, we focus on job characteristics (non-standard work, flexible work arrangements, flexible work schedules), psychosocial work factors (feelings of job insecurity), and workplace characteristics (for-profit versus not-for-profit agency, collective agreement coverage). Non-standard work refers to part-time, casual, and contract work; flexible work arrangements refer to shift work and extended days (compressed workweek). Flexible work schedules refer to flexible schedule (choice of times to begin and end the workday). Self-esteem and mastery mediate the relationship between input and outcome variables.

For data we used our data (collected under a previous grant of the co-principal investigators, with Dr. Denton as the principal investigator of the previous research). That data

collection process was funded by the Workplace Safety and Insurance Board. For the qualitative data we used interviews and discussion groups, and for the quantitative data we used a questionnaire. The quantitative data were collected through the “Health and Worklife Questionnaire” (a survey of all workers) and the “Survey of Former Employees.” This triangulation of data collection gives us a more in-depth, comprehensive picture of the study findings.

Between September 2000 and April 2001, we conducted 59 key informant interviews with the chief executive officers, directors, managers, administrators, supervisors, local union presidents or chief stewards, management and union health and safety representatives, and board members at 11 homecare agencies in Hamilton. We then followed with 29 focus groups, held between June and November 2001. In total, 171 employees from the agencies participated in focus groups. The focus groups were conducted separately for each occupation and separately for each agency. However, because the number of office staff members was so small and respondents could be easily identified, we conducted fewer focus groups with them.

The focus groups were as follows: five with nurses (registered nurses and registered psychiatric nurses); four with therapists (five disciplines); eight with home support workers; seven with supervisors and co-ordinators; three with office staff; and two with case managers. The “Health and Worklife Questionnaire” was mailed to all homecare workers (N=2,355) in 11 agencies in Hamilton between January and April 2002. A total of 1,311 homecare workers responded to the survey. Thus, excluding those who could not be reached, the response rate was 70 percent. The “Survey of Former Employees” was sent to those who left their employer since 1996 when the restructuring started. In 1996, 715 homecare workers responded to an earlier survey of three non-profit homecare agencies in Hamilton. By the fall of 2001, 362 (51 percent)

of these respondents had left the agency. Of those who left, we were able to locate 293 former employees and mailed each a self-completion questionnaire. One hundred eighty-nine (65 percent) responded to this survey.

Measures for qualitative data are open-ended questions on health and worklife (see the Workplace Safety and Insurance Board report). In key informant interviews we asked questions about work environment at the participating organization, human resource issues, and the occupational health of workers. Similar questions were used in interviews with management and union representatives. In focus groups we asked participants to discuss their work, the changes they had observed in the homecare system and the impact of these changes on homecare, and their occupational health (both mental and physical components).

Measures for quantitative data include well-established, valid, and reliable scales of job satisfaction (Denton et al. 2002b), stress (Denton et al. 2002a and b), burnout (Maslach and Jackson 1986), musculoskeletal disorders (Zeytinoglu et al. 2000 as adapted from Kuorinka et al. 1987), job insecurity (Cameron et al. 1994), and retention (propensity to leave) (Lyons 1971). Questions on measures of long-term health conditions diagnosed by a health professional, self-esteem, and mastery are from the National Population Health Survey (1998), and work contract (full-time, part-time, casual, contract; job sharing) and work schedule (overtime, extended day, shift work, flexible schedule) questions are from Zeytinoglu et al. (2002). While a few of these measures were based on single questions, the vast majority were multiple-item scales with high reliability scores.

The measures included in the “Survey of Former Employees” are on the type of work, intrinsic and extrinsic job satisfaction, job stress, reasons of leaving their former agency, all jobs held since then, and for each job listed information about the type of job, reasons for choosing

the job, type of pay, job stress, and a series of questions on both intrinsic and extrinsic job satisfaction.

For the analysis of the qualitative data, discussions and interviews were tape recorded and transcribed verbatim. We then read the transcribed data separately and identified common themes relating to health concerns and working conditions. It is important to note that while the coding scheme was influenced by our expertise, previous research, and the literature on work and health, it was the verbatim comments of the interview and focus group participants that we heavily relied upon in the development of the coding scheme. Thus a coding scheme was not “imposed” on the data prior to reading the participants’ comments. This technique is consistent with the guidelines suggested by Miles and Huberman (1994).

The verbatim data were first coded by a research assistant and then double-coded by a second research assistant. The research assistants met from time to time during this process to review their coding and to discuss any discrepancies in the codes. There was an internal consistency among coders and the intercoder reliability was high (greater than 80 percent). The codes were then attached to the verbatim comments in QSR N5, a qualitative data analysis software program. If respondents expressed several ideas or themes in their discussions/interviews, each was coded separately. The data were analysed using QSR N5 software in two ways. First, we counted the number of times each theme emerged in the respondents’ answers to the open-ended questions. Second, all the verbatim responses related to each theme were printed and analysed for content.

For the quantitative data, the “Health and Work Life Questionnaire” data (of all employees) were entered into an SPSS system file. Then they were edited and all outliers

checked. Then frequencies were produced for each variable. We constructed scales and tested each scale for reliability. In the analysis, correlations, t-tests, and regression analysis were used.

For the “Survey of Former Employees” data analysis, we added a variable to our 1996 data that identified those homecare workers who had left their agency in the period between 1996 and 2001. With this variable, we merged the responses to the 2001 “Survey of Former Employees” with our 1996 survey data to predict turnover.

Results

Phase 1

In the first phase of the project we focused on the mental and physical health of homecare workers. Results from Phase 1 of the study show that some homecare workers have high levels of stress and burnout. On the positive side, workers in all occupational groups in this sector show high levels of self-esteem and mastery. In terms of physical health problems, a number of diagnosed health problems are common among this workforce, such as back pain, arthritis and rheumatism, migraine headaches, high blood pressure, stomach and intestinal disorders, and cancer. Physical health problems among this workforce are much higher than the comparable group in the Canadian population. Musculoskeletal disorders are also significant occupational health problems for this workforce. Another occupational health problem for this workforce is workplace harassment and violence. Taking into consideration that these workers may be working with clients with dementia or other mental health problems, it is not uncommon for these workers to experience unacceptable racial/ethnic or sexual comments or harassment.

Workers have high levels of job insecurity and are afraid of losing their jobs or their workplaces closing because their agency did not get the contract. Still, the workers are dedicated to their agencies and show low levels of propensity to leave. However, managers and supervisors are having problems managing the increasingly stressed, dissatisfied homecare workforce. Many respondents are critical of the restructuring and managed competition process.

Results showed that restructuring and organizational change in the homecare sector has contributed to the deteriorating health of workers. The business-like work environment, lack of

resources in the homecare sector, government budget cuts, wage inequalities, work intensification, and perceived decline in the quality of care given to clients are all taking their toll on these workers. Their stress levels are increasing and for some, burnout is a significant problem. The restructuring and organizational change factors are also associated with increased levels of diagnosed and self-reported musculoskeletal disorders, job dissatisfaction, absenteeism, fear of job loss, and propensity to leave the workplace. In addition, the poor physical work environments — such as safety hazards in clients' homes and repetitiveness of the job — and poor psychosocial work environments — such as lack of organizational (and supervisory) support, low co-worker support, lack of control over work, and lack of time to provide emotional support to clients — are all factors associated with increased levels of stress, burnout, musculoskeletal disorders, job dissatisfaction, absenteeism, feelings of job insecurity, and propensity to leave their agency.

Phase 2

In the second phase of the study, we focused on a set of factors affecting employee and organizational outcomes, including job satisfaction, stress, physical health problems including musculoskeletal disorders, propensity to leave the organization, and turnover.

Results show that case managers report the lowest level of job satisfaction among all six occupational groups, nurses and home support workers are in the middle, and therapists, office support staff, and managers show the highest levels of job satisfaction. The data show that factors associated with job satisfaction differ by occupation.

In examining factors associated with job satisfaction, multivariate regression results show that managers, supervisors, and co-ordinators who have high levels of mastery are more likely to be satisfied with their jobs. Those with heavy workloads are less likely to be satisfied with their

jobs. Case managers who experience emotional labour (that is, the labour involved in dealing with other people's feelings) are more likely to be satisfied with their jobs and those with symptoms of stress are less likely to be satisfied with their jobs. Office staff who are satisfied with their schedule and pay are more likely to be satisfied with their jobs. Nurses who have co-worker support, emotional labour, and who are satisfied with their schedules are more likely to be satisfied with their jobs, and those reporting job insecurity are less likely to be satisfied with their jobs. Therapists who are satisfied with their schedules are more likely to be satisfied with their jobs. Home support workers who have organizational support, work one-on-one with clients, are satisfied with their scheduling, and who are satisfied with their pay are more likely to be satisfied with their jobs. Home support workers with symptoms of stress, heavy workloads, and job insecurity are less likely to be satisfied with their jobs. In conclusion, in each occupation, different factors seem to play a role in job satisfaction.

A second analysis examined the question: *Are job flexibility and job insecurity and stress associated with self-reported musculoskeletal disorders among homecare workers?* This is a follow up study of our previous studies on stress (Denton et al. 2002a and b) and musculoskeletal disorders (Zeytinoglu et al. 2000 and 2002) among homecare workers. In this study, flexibility refers to the flexible type of job (part-time or casual) and having a flexible schedule that allows workers to adjust the starting and ending times of their workday. Job insecurity refers to the fear of job loss, and stress is a scale of stress symptoms (Denton et al. 2002a). The purpose of analysis is to examine the associations between these factors and self-reported musculoskeletal disorders among homecare workers.

We separately analysed the data for office and visiting staff since they work in different environments. Those with diagnosed musculoskeletal disorders are excluded from the analysis.

Results show that of office workers, 83 percent are full-time, 13 percent are part-time, and five percent are casual. Twenty-six percent have a flexible schedule. Of visiting workers, 44 percent are full-time, 38 percent are part-time, and 16 percent are casual. Of these workers, 62 percent have a flexible schedule. Multivariate analysis (the OLS regression) results show that, for office workers and visiting workers, increased stress is significantly associated with self-reported musculoskeletal disorders. However, the flexible type of job (working part-time or casual), having a flexible schedule, and job insecurity are not significantly associated with self-reported musculoskeletal disorders.

Next we addressed the incidence of work-related injuries among homecare workers during a one-year period. This study showed that 11 percent of homecare workers reported having at least one work-related injury, and that sprains and strains are the most common form of work-related injury in homecare. The results provide knowledge to develop workplace safety policies for homecare workers to create healthy and safe workplaces.

Responding to increasing healthcare costs, deficit financing, and population aging, many countries are exploring new “cost-efficient” healthcare models which attempt to shift the locus of care from expensive acute care institutions into community and home-based settings. Ontario recently shifted from a publicly financed and delivered care service to a market-based approach whereby service provider organizations compete for contracts to provide care services. Although the recruitment and retention of homecare workers is seen as an essential element in the provision of high-quality care, there is a lack of knowledge on the impact of the introduction of “managed competition” on the job satisfaction and retention of homecare workers. Using survey data of 834 homecare workers who had been working in homecare prior to the introduction of managed competition in 1997, we investigated the impact of the implementation of managed

competition on job satisfaction and propensity to leave homecare. Findings indicate that changes associated with restructuring, including an increased emphasis on the “business of care” and its effects and work intensification combined with low levels of pay and a shortage of hours, have led to lower levels of job satisfaction. In addition, staff shortages, fewer resources, job insecurity, and work intensification were also all significantly related to a greater propensity to leave. Taken together, the findings suggest that restructuring may have led, or be leading, to a greater propensity to leave among those in the homecare sector.

Results of this study also provided evidence that the implementation of managed competition increased the turnover rate for homecare workers. In 1996, we conducted a survey of visiting homecare workers in three of the non-profit agencies who participated in our current study. We found that in the five-year period following the implementation of managed competition, half of these employees had left their 1996 employer. Findings showed that during each contract tender period, there was a corresponding increase in the number of homecare workers who left their agency. Further, the marketization of homecare led to an intensification of work, to the casualization of work, lower pay, poorer benefits, and less job security. These changes were reflected in the reasons given by homecare workers for leaving their agencies.

We mailed a self-completion questionnaire to those who had left asking about their reasons for leaving the agency and their subsequent work experiences. Respondents indicated dissatisfaction with pay, hours worked, lack of organizational support, work load, and health reasons including work-related stress as reasons for leaving. Less than one-third remained employed in the homecare field, one-third worked in other healthcare workplaces, and one-third was no longer working in healthcare. Homecare workers found jobs with better pay and better benefits and more job security. Nurses were most likely to obtain jobs in the hospital sector,

while personal support workers obtained jobs in nursing homes. Particularly concerning was the fact that more than one-third of personal support workers had left the healthcare field altogether. Finding another job in the service, retail, or manufacturing sectors that may provide better job conditions is an attractive alternative to working in an unstable homecare environment for some personal support workers. This represents a tremendous loss of skilled and trained staff out of the home and healthcare sectors.

Their responses to our 1996 survey were used to predict turnover. Results show that nurses were more likely to leave if they had unpredictable hours of work, worked shifts or weekends, and had higher levels of education. They were more likely to stay with the agency if they reported working with difficult clients, had predictable hours, good benefits, had children younger than 12 years of age, and were younger. Personal support workers were more likely to leave if they reported higher symptoms of stress and had difficult clients. They were more likely to stay if they perceived their benefits to be good.

This study found that working conditions in for-profit care agencies are significantly different than those which characterize the non-profit sector. This supports prior research which found that workers in for-profit agencies are more likely to be subject to the market-based principles associated with a post-industrial economy and are as a result less likely to be unionized, receive fewer (if any) benefits such as paid sick and vacation days, work fewer uninterrupted hours, and are more likely be classified as part-time employees. Further, workers for non-profit agencies were more likely to work overtime, both paid and unpaid, than their for-profit counterparts.

Results from this study reveal that front-line workers in for-profit agencies seem to have experienced fewer impacts of healthcare restructuring than their non-profit counterparts.

Homecare employees working in for-profit agencies report more positive working conditions such as greater resources, less workload intensification, and fewer staff shortages, as well as a greater perceived ability to provide their clients with high-quality continuous care than their non-profit counterparts. These findings appear to contradict a sizeable literature that argues workers in the for-profit sector, given their relative disadvantage in terms of benefits and union protections, would perceive their work and the homecare environment more negatively than their non-profit counterparts and see clients on an inconsistent basis or as being at greater risk of experiencing unmet care needs.

Documents and reports related to this project can be downloaded from the Community Care Research Centre and SEDAP web sites at:

<http://www.communitycareresearch.org/research/CCRCSWRWproject.htm>

<http://socserv.socsci.mcmaster.ca/~sedap/p/sedap110.pdf>

<http://socserv.socsci.mcmaster.ca/~sedap/p/sedap128.pdf>

Additional Resources

The following items would be helpful for decision makers and researchers wishing to do more reading:

The Community Care Research Centre web site:

<http://www.communitycareresearch.org/index.htm>

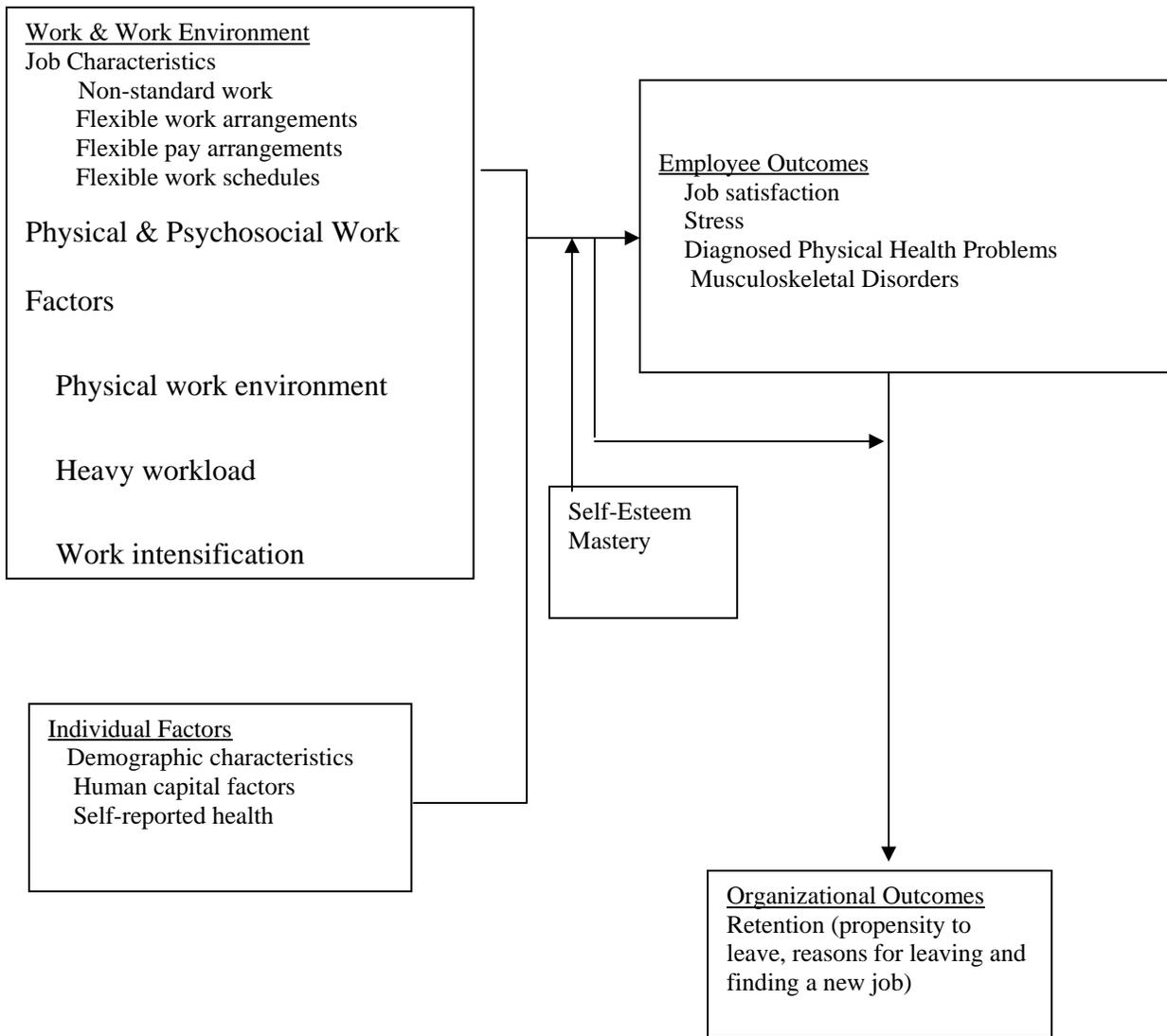
Social and Economic Dimensions of an Aging Population web site:

<http://socserv.socsci.mcmaster.ca/~sedap/>

Further Research

The results presented here refer to a case study of a mid-sized city in Ontario. As such, the findings cannot be generalized to all homecare workers in Ontario. Because there is no centralized list of homecare workers, it is difficult to expand this study to the provincial or national level. However, it may be possible to work with provider associations such as the Ontario Association of Community Care or the Ontario Association of Community Support Services to collect this data at the provincial level. Since healthcare is managed at the provincial level and is not covered under the Canada Health Act, each province organizes and finances homecare differently. Therefore Canada provides a natural experiment for a comparative study of homecare systems, working conditions, and access to and quality of care. With the introduction in seven provinces of the Resident Assessment Instrument and the possibility of linking finance data to these data sets, and with the co-operation of provider associations, it may become possible to investigate home healthcare issues on a much wider scale.

Figure 1: The conceptual model of homecare workers' job satisfaction, mental and physical health, and retention



References

Armstrong, P., Armstrong, H., Bourgeault, I., Choiniere, J., Mykhalovskiy, E., and White, J.P. (2000). *Health Thyself: Managing Health Care Reform*. Aurora, ON: Garamond.

Aronson, J., and Neysmith, S. (1996). Work of visiting homemakers in the context of cost cutting in long term care. *Canadian Journal of Public Health* 87.

Bloom J.R., Alexander J.A. and Nuchols B.A. (1992). The effect of the social organization of work on the voluntary turnover rate of hospital nurses in the United States. *Social Science and Medicine* 34 (12), 1413–1424.

Cameron, S., Horsburgh, M., Armstrong-Stassen, M. (1994). *Effects of Downsizing on RNS and RNAs in Community Hospitals*. Quality of Nursing Worklife Research Unit, Hamilton, Ontario.

Canadian Association for Retired Persons (CARP). (1999). *Putting a Face on Home Care: CARP's Report on Home Care in Canada 1999*. Queen's Health Policy Research Unit. Kingston, ON: Queen's University.

Caplan Report. (2004). *Realizing the Potential of Home Care: Competing for Excellence by Rewarding Results*. Ministry of Health, Government of Ontario.

http://www.health.gov.on.ca/english/public/pub/ministry_reports/ccac_05/ccac_05.pdf

Community Care Research Centre. (2002). *Report of Proceedings: Community Care Research Centre Roundtable*. Unpublished.

Cooper, C., Dewe, P., and O'Driscoll, M. (2001). *Organizational Stress: A Review and Critique of Theory, Research and Applications*. Thousand Oaks, CA: Sage.

Denton, M., Zeytinoglu, I.U., Webb, S., & Lian, J. (1999a). Occupational Health Issues Among Employees of Home Care Agencies. *Canadian Journal on Aging*, 18(2): 154-181.

Denton, M., Zeytinoglu, I.U., Webb, S., & Lian, J. (1999b). Healthy Work Environments in Home-Care Agencies. In Denton, M., Hajdukowski-Ahmed, M., O'Connor, M., & Zeytinoglu, I.U. (Eds.), *Women's Voices in Health Promotion*. Toronto: Canadian Scholars' Press, 45-60.

Denton, M., Zeytinoglu, I.U., & Davies, S. (2002a). Working in Clients' Homes: The Impact on the Health and Well-Being of Visiting Home Care Workers. *Home Health Care Quarterly*, 21(1): 1-27.

Denton, M., Zeytinoglu, I.U., & Davies, S. (2002b). Job Stress and Job Dissatisfaction of Home Care Workers in the Context of Health Care Restructuring. *International Journal of Health Services*, 32(2): 327-357.

Denton, M., Zeytinoglu, I. and Davies, S. 2003. *Organizational Change and the Health and Well-Being of Home Care Workers*. SEDAP Working Paper #110, <http://socserv2.socsci.mcmaster.ca/sedap>.

Griffeth, R.W., Hom, P.W., and Gaertner, S. (2000). Meta-Analysis of Antecedents and Correlates of Employee Turnover: Update, Moderator Tests, and Research Implications for the Next Millennium. *Journal of Management*, 2000, 26, 3, 463-504.

Hom, P. W., and Griffeth, R.W. (1991). A structural model of the process of employee turnover: Cross-sectional and longitudinal tests. *Journal of Applied Psychology*, 76:350-366.

Hom, P. W., and Kinicki, A. J. (2001). Toward a greater understanding of how dissatisfaction drives employee turnover. *Academy of Management Journal*, 44(5):975-987.

Human Resources Development Canada. (2003a). *Canadian Home Care Human Resources Study, Synthesis Report*, <http://www.cacc-acssc.com/english/pdf/homecareresources/EngSynth.pdf>

Human Resources Development Canada. (2003b). *Canadian Home Care Human Resources Study, Phase 1 Report: Setting the Stage: What Shapes the Home Care Labour market?* <http://www.cacc-acssc.com/english/pdf/homecareresources/final-report.pdf>

Human Resources Development Canada. (2003c). *Canadian Home Care Human Resources Study, Technical Report*, <http://www.cacc-acssc.com/english/pdf/homecareresources/EngTechnic.pdf>

Koehoorn, M., Lowe, G., Rondeau, K., Schellenberg, G. and Wagar, T. (2002). *Creating High-Quality Health Care Workplaces*. *Work Network Discussion Paper W 14*. Ottawa: Canadian Policy Research Networks Inc.

Kuorinka, I., Jonnson, B., Kilbom, A., Vinterberg, H., Biering Sorenson, F., Anderson, G., and Jorgensen, K. (1987). Standardized Nordic Questionnaires for the Analysis of Musculoskeletal Symptoms. *Applied Ergonomics*, 18 (3): 233-237.

Lee T. W., Mitchell T. R., Holtom B. C., McDaniel L. S. and Hill J. W. (1999). The Unfolding Model of Voluntary Turnover: A Replication and Extension. *Academy of Management Journal*, 42 (4): 450-462.

Lowry, J.A. (2002). Why Having a National Home Care Program is a Women's Issue. *The Network Magazine*. Canadian Women's Health Network, 5 (2/3).

Lyons, T.F. (1971). Role Clarity, Need for Clarity, Satisfaction, Tension, and Withdrawal. *Organizational Behavior and Human Performance* 6:99-110.

Maslach, C. and Jackson, S. (1986). *Maslach Burnout Inventory – Human Services Survey*. Palo Alto, Ca: Consulting Psychologists Press.

- Messing, K. (1998). *One-Eyed Science: Occupational Health of Women Workers*. Philadelphia: Temple University Press.
- Miles, M., and Huberman, A. (1994). *Qualitative Data Analysis*. Second Edition. Sage.
- Mobley, W. H. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. *Journal of Applied Psychology*, 62:237–240.
- Mobley, W.H., Griffith, R., Hand, H. and Meglino, B. (1979). *A review and conceptual analysis of the employee turnover process*. *Psychological Bulletin*, 62:493-522.
- Quinlan, M., Mayhew, C., and Bohle, P. (2001). The Global Expansion of Precarious Employment, Work Disorganization, and Consequences for Occupational Health: A Review of Recent Research. *International Journal of Health Services*, 31(2).
- Romanow Commission (prepared by Canadian Health Service Research Foundation). (2002a). *Discussion Paper: Homecare in Canada*. Ottawa, ON: Commission on the Future of Health Care in Canada.
- Romanow Commission (prepared by Canadian Health Service Research Foundation). (2002b). *Issue/Survey Paper: Health Human Resources in Canada's Health Care System*. Ottawa, ON: Commission on the Future of Health Care in Canada.
- Zeytinoglu, I.U. (Ed). (1999). *Changing Work Relationships in Industrialized Economies*. Amsterdam, the Netherlands: John Benjamin Publishers.
- Zeytinoglu, I.U. (2002). *Flexible Work Arrangements: Conceptualizations and International Experiences*. *Studies in Employment and Social Policy*, No.20. The Hague: Kluwer Law International.
- Zeytinoglu, I.U., Denton, M., Hajdukowski-Ahmed, M., O'Connor, M., & Chambers, L. (1999). Women's Work, Women's Voices: From Invisibility to Visibility. In Denton, M., Hajdukowski-Ahmed, M., O'Connor, M., & Zeytinoglu, I.U. (Eds.), *Women's Voices in Health Promotion*. Toronto: Canadian Scholars' Press, 21-29.
- Zeytinoglu, I.U., Denton, M., Webb, S., & Lian, J. (2000). Musculoskeletal Disorders Among Office and Visiting Home Care Workers: Associations with Work Factors and Injuries. *Women and Health*, 31(2/3): 1-35.
- Zeytinoglu, I.U., Denton, M., & Davies, S. (2002). Casual Jobs, Work Schedules and Self-Reported Musculoskeletal Disorders Among Visiting Home Care Workers. *Women's Health & Urban Life*, 1(1): 24-43.

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