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THE PERSONAL HEALTH AND WELLBEING OF ADULTS WHO WORK IN EARLY CHILDHOOD EDUCATION IN NEW ZEALAND

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ABSTRACT

This research is a descriptive study of the personal health and wellbeing of early childhood workers in New Zealand and describes the health status, behaviours and concerns of adults working in three early childhood education settings. Situated within the concept of Workplace Health Promotion and the idea of healthy work settings, it supports the New Zealand government's strategy to improve workplace health and safety by providing base-line data on the health and wellbeing of early childhood workers. A review of the literature highlighted four main areas of concern for adults who work with young children: exposure to infectious diseases, occupational injuries, risks to pregnant childcare workers and work related stress.

A survey of 168 randomly selected participants was carried out in the Wellington area, 73 childcare teachers, 58 kindergarten teachers and 37 home-based educators. Ninety-two percent of respondents reported that they had good or excellent health. Significant differences were found between the groups for nutrition, days absent due to illness, accidental injuries, job-related stress and ergonomic aspects of their work. Kindergarten teachers exhibited the most areas of health concern and home-based educators the least. All groups reported an increase in various physical symptoms since working with children, in particular backaches, muscle strain and fatigue. One quarter of respondents experienced an illness related to their work with children during the last year, most commonly respiratory and gastrointestinal illnesses.

It is intended that the findings from this study will contribute towards the development and progress of workplace health promotion in early childhood education settings. The study alerts early childhood education employers of the need to assess influences on employee health such as workload and stress related issues, the provision of an ergonomically healthy work environment and adequate conditions of employment.

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CHAPTER 1

INTRODUCTION TO THE STUDY

Introduction

According to the Ministry of Education (2004a) there are approximately 13,000 adults employed in early childhood education services in New Zealand. This figure represents a significant growth of early childhood workers over the last decade due to an increased demand in early childhood education providers (Ministry of Education, 2004a). The general focus of this research is on the occupational health and safety of early childhood workers. More specifically, the research aim was to describe the health status, health behaviours and health concerns of adults working in three different early childhood education settings, childcare centres, kindergartens and home-based care.

Occupational health and safety in early childhood education has not been widely researched but it has long been recognised that employees in this area are exposed to health and safety risks associated with this type of work (Calder, 1994). Exposure to infectious diseases, musculoskeletal strain, accidental injuries, risks during pregnancy and occupational stress are the most commonly identified health and safety issues for adults working in the early childhood sector (Robertson, 2003). Strategies to reduce health and safety risks to staff and children in order to provide a healthy work environment are an important aspect of quality early childhood education.

This chapter provides an introduction to the study and explains how it is situated within the concept of workplace health promotion. Links to the New Zealand government strategies about workplace health promotion are identified and discussed, as well as strategies relating to strengthening early childhood education. An overview of the different early childhood education settings used in

the study is provided as well as the relationship between occupational health and quality early childhood education.

Workplace Health Promotion

This study is positioned within the concept of workplace health promotion developed from the initial idea of 'health promotion', defined in the Ottawa charter as "the process of enabling people to increase control over and to improve their health" (World Health Organisation (WHO), 1998, para. 1). The idea of workplace health promotion has developed along with the recent approach of "settings for health", where the emphasis is on a healthy environment in which people spend their time such as schools, hospitals, cities and workplaces.

The New Zealand's governments most recent contribution to workplace health promotion occurred in June 2005 when it launched the 'Workplace Health and Safety Strategy for New Zealand to 2015' (Department of Labour, 2005). The main aim of this strategy is to improve New Zealand's workplace health and safety performance and to continue the development of high quality and productive workplaces. The strategy targets several priority areas relevant to the early childhood education industry, the most significant of these are: airborne substances, manual handling, slips, trips and falls, psychosocial work factors and small businesses (such as childcare centres).

One of the principles of the strategy is that of "participation": the idea of ensuring that all stakeholders are involved in workplace health and safety, including the employee and their family, the employer, community, industry groups and government agencies. This participatory approach is part of the emergence of a new world view of workplace health promotion that occurred in the 1990s (Chu & Dwyer, 2002; Ellis, 2001). In this view the nature of workplace health promotion is seen as an ecological system where relationships, interdependence and connectedness are fundamental. The focus has shifted from the individual, to a

system within which the individual works, socialises and resides. As suggested by Stokols, Pelletier and Fielding (1996), there may be "a paradigm shift away from individually oriented wellness programs toward broader formulations emphasizing the joint impact of physical and social work environment, job-person fit, and work policies on employee well-being" (p.137).

Workplace health promotion is seen as an integrative model and utilises the WHO's Global Healthy Work Approach (WHO, 1997) based on the following four principles; health promotion and disease prevention, occupational safety and hazard reduction, organisational development and human resource management. As well as improving health outcomes, this integrated approach has the potential to improve organisational outcomes such as improved work satisfaction, better productivity and a supportive social climate and workplace culture (Chu & Dwyer, 2002).

Healthy Work Organisations

Accompanying this idea of workplace health promotion and developed from the WHO's (1998, para.3) "settings for health" approach is the concept of healthy work organisations. This term appears in the organisational literature and refers to the idea "that worker wellbeing and organisational effectiveness can be fostered by a common set of job and organisational design characteristics" (Murphy & Cooper, 1999, p.1). In their review of healthy work organisations research, Wilson, Dejoy, Vanderberg, Richardson and McGrath (2004) found that several areas of workplace research are represented including: organisational development and systems, health promotion, climate/cultural factors and job stress. However, there was little evidence on the types of models and characteristics of healthy work organisations that are the most effective.

In order to test the effectiveness of using a model of healthy work organisation, Wilson et al. (2004) formed their own conceptual model based on six core components; organisational attributes, organisational climate, job design, job future, psychological work adjustment and employee health and wellbeing. Using

questionnaires, they surveyed employees in a retail organisation to determine the relationship between the constructs developed for their model. Results from their study showed very good support for their proposed healthy organisation model. They found that employee's perceptions of their organisation affected their perception of the organisation climate. This in turn impacted on the way people related to their job and how they viewed their future in the organisation. Ultimately this had an impact on their work adjustment and health and wellbeing.

One of the most significant findings from Wilson et al.'s (2004) research and several other studies is that the creation of a healthy work organisation is dependant on organisational action, commitment and leadership (Fassel, Monroy & Monroy, 2000; Lindstrom, Schrey, Ahonen & Kaleva , 2000). Core values and beliefs of the organisation are found to be reflected in policies and procedures at all organisational levels and interventions for a healthy work place need to foster participation of all employees.

The relationship between the organisational climate, and the health and wellbeing of employees is reflected in one of the outcomes stated in the New Zealand Workplace Strategy (Department of Labour, 2005) that is, to develop workplace preventive cultures: "a shared set of values, beliefs, attitudes and ways of behaving that supports the prevention of harm to people at work" (p.12). In this notion of a preventive culture, health and safety is built into the everyday environment, it is not seen as additional. How early childhood environments operate within this idea of a preventive culture is not widely known.

Organisational culture, and health and safety in childcare were the focus of one study of 240 childcare workers in Texas (Calabro et al., 2000). The authors assessed the worker's perceptions of five organisational climate determinants; structure, cohesiveness, work group compliance, risk avoidance and pressure (work demands and stressors) and found that the childcare workers generally had a favourable perception of the health and safety determinants of their work

environment. This finding was unexpected as they also found that there was a high incidence of illnesses (nearly 60% reported illness relating to the children) and trips, falls and back injuries (33%). One theory suggested by the authors to explain this discrepancy is that childcare workers may perceive that reducing their work-related illness is something beyond their control. Therefore, childcare workers change their perception of their work situation viewing minor illness and injuries as an inevitable part of the job and not amenable to health and safety measures. A limitation of this study was that the sample was non-random and participation was controlled by directors of childcare centres, this may have influenced the results. Further research in this area is required to determine if this perceptual issue is a common phenomenon among childcare workers.

Implementing Workplace Health Promotion

Strategies for the implementation of workplace health promotion vary and there is no one model that is applicable to all organisations or industries. However, commonly used approaches involve the participation of employers and employees to develop specific goals and objectives for the organisation (Chu & Dwyer, 2002; Ellis, 2001). Successful strategies require an integrated approach of individual directed measures in combination with the environmental, organisational, ergonomic and social factors. Through such tools as participatory needs assessments, staff concerns can be identified and workplace improvement strategies can be developed.

An assessment of current health problems and needs is often the initial step towards the setting of workplace health promotion goals. Health risk appraisal is a popular assessment tool to determine individual health risks and typically asks questions about self-reported health behaviours and personal health history (O'Donnell, 2002). The size and type of the organisation will have an influence on the types of approaches that can be used to gain this information. It is likely that smaller organisations (such as childcare centres) will rely on findings from population-based industries similar to their own. Conducting their own assessment

and surveys would be time consuming and involves areas of expertise that may not be available to the organisation.

Prior to the implementation of suitable and appropriate strategies for workplace health promotion, access to baseline data can provide valuable sources of information about individual wellbeing, common health issues and relevant related organisational characteristics. It is intended that this study will contribute to the baseline data and body of knowledge about the health of adults working in early childhood education in New Zealand. This knowledge will provide an initial starting point for the planning and development of Workplace Health Programmes and contribute to quality in early childhood education programmes.

Occupational Health and Quality Early Childhood Education

Quality early childhood education is the foundation for learning and educational achievement for young children. It contributes to the development of cognitive skills, as well as self-esteem and the reinforcement of social and cultural values (Ministry of Education, 2002). The findings of The Competent Children Project, a longitudinal study commissioned by the Ministry of Education (2004b) provided evidence of the concurrent, short-term and long-term impact of early childhood education experience. For example, the recent report of the children in the study now aged 12 years, shows that participation in quality early childhood education continued to be a contributing factor to the children's competency in mathematics and literacy.

Quality early childhood education is a priority for the current New Zealand Government who has made a commitment to strengthening early childhood education services and produced a 10 year strategic plan, *"Pathways to the Future: Ngā Huarahi Arataki"* (Ministry of Education, 2002).

The three core goals of the plan are to;

- increase participation in quality early childhood education services
- improve the quality of early childhood education services and
- promote collaborative relationships. (p.2)

A network of strategies has been developed by the Ministry of Education (2002) in order to achieve these goals. The researchers own interest is pertinent to the second goal that concerns the quality of early childhood education services and in particular how adult health and wellbeing is related to the quality of their workplace environment.

In their review of early childhood education literature, Smith, Grima, Gaffney and Powell (2000) discussed the issues related to quality in the New Zealand context of early childhood education and identified aspects of quality as either structural or processes. Process qualities are components that set the framework within which the quality learning processes occur. Structural qualities include adult – child ratios, group size, staff qualification and experience, wages and working conditions, staff stability and of particular relevance to this study, the health and safety aspects of the environment for both staff and children. Smith (1996), in her study on working in infant childcare centres in New Zealand, found that the working conditions of childcare staff was of crucial importance to the provision of a quality childcare environment. The health and safety of childcare teachers is of paramount importance if they are to be positive role-models and quality educators for young children.

Justification for the Study

Little is known about the current health issues for adults working in New Zealand early childhood education settings and no specific studies have been done in New Zealand to explore the health and wellbeing of this group. The only available New Zealand data on reported workplace related injuries is from the Accident

Compensation Corporation (2003) which shows that the range of injuries in adults is consistent with those found in overseas studies. Most information and knowledge has been based on overseas literature and research. The purpose of this study is two-fold; firstly it will provide base-line data on the health and wellbeing of early childhood workers, as described above, to assist in the development of workplace health programmes applicable to the New Zealand early childhood setting. This will also support the 'Workplace Health and Safety Strategy for New Zealand to 2015' (Department of Labour, 2005).

Secondly, findings will provide a valuable contribution to the New Zealand Government strategy to improve the quality of early childhood education services (Ministry of Education, 2002). One facet of this strategy is the intention to research early childhood teacher workforce issues and the retention of qualified teachers. Personal and workplace characteristics that contribute to workforce issues include the health, wellbeing and occupational safety of teachers. It has also been found that health factors such as emotional exhaustion are linked to turnover of staff in childcare (Manlove & Guzell, 1997). High staff turnover is significantly related to lower quality education, children need stable staff to build positive and trusting relationships with their caregivers, a vital aspect of social and emotional development (Smith et al., 2000).

The researchers own interest in this area emanates from 12 years of teaching health and wellbeing to tertiary students training to work in both centre based and home-based early childhood education. This teaching includes children's health and wellbeing, as well as education for early childhood students on how to minimise and manage risks of personal exposure to health hazards in their work environment, an important component of teacher training. The ability to maintain a high level of personal health and wellbeing is a critical aspect for work satisfaction and maintaining stamina in a physically and emotionally demanding job.

A comprehensive study of the health status, behaviour and concerns of adults in early childhood settings by Gratz and Claffey (1996) provided an excellent model for the development of further research in this area. It was decided that a similar study based on the same questionnaire, adapted for the New Zealand setting, could be used to determine the health and wellbeing of adults working different early childhood settings in New Zealand. The following description provides an overview of the three settings that were chosen for the study.

New Zealand Early Childhood Education Settings

New Zealand has a diverse range of early childhood education settings to meet the education and care needs of most children, parents, families and whanau. Some of the groups based options include childcare centres, kindergartens, Kohanga Reo, Pacific Island centres, Montessori and Rudolph Steiner. Home-based options are family day care and nanny. Early childhood education is not compulsory for children in New Zealand however the majority of children attend some form of early childhood education at some stage during their preschool years. For the purposes of this research the parameters of the study were limited to three commonly used early childhood settings; kindergartens, childcare centres (education and care centres) and home-based services. Each of these settings provides its own style of early childhood education. They cater for the different needs of children and their families/whanau, with differing philosophies and varying methods of funding, organisation and management.

Education and Care Settings (childcare centres)

"Education and care centres provide either sessional, all day or flexible hours programmes for children from birth to school age" (Ministry of Education, 2002, p.5). They are commonly referred to as childcare centres. Private pre-schools are also included in this category. The term 'childcare teacher' is used within this context to describe any adult working in a childcare centre who has direct contact with the children. This may include qualified teachers and untrained staff. There

are numerous unqualified adults working in education and care centres, only 50% of childcare teachers have a Diploma of Teaching (Early Childhood Education(ECE)) or higher teaching qualification (Ministry of Education, 2004a). In 2002 only 6.5% of centres had all teachers qualified a situation which the government intends to change (Ministry of Education, 2002). The childcare centre industry is in the process of a phase-in period of increased funding and increased wages for qualified teachers (May, 2005). Those centres that meet an agreed quality criteria associated with staff qualifications will be funded at a higher rate. This process is supposed to be completed by 2008 and is the result of a long process to improve the working conditions and wages of childcare centre staff.

Childcare is a growth industry in New Zealand. A change in employment patterns for families in the last decade, particularly the rise in maternal employment, has increased the demand for childcare. Early childhood statistics released by the Ministry of Education (2004a) show that in the period of July 2000 to July 2003, there was an increase of 197 licensed childcare centres in New Zealand. This was the only type of early childhood service to show a significant increase. The minimum teacher:child ratio is 1:5 for under 2 years old and 1:10 for over 2 years old attending all day. In 2004 there were nearly 81,000 children enrolled in this service almost half of the total number of children attending licensed early childhood education providers (Ministry of Education, 2004a).

Many education and care centres are privately owned, or they may be part of another organisation such as a school, tertiary institute or government employment body. Several education and care centres are community owned and operated through trusts, community organisations and churches. Financial costs are usually met through private fees paid by the family and some government funding.

Kindergartens

The second type of early childhood setting used in the study was kindergartens. "Kindergartens generally operate sessional early childhood education for children

between the ages of three and five" (Ministry of Education, 2002, p.5). In 2004 approximately 45,000 children were enrolled in kindergartens (Ministry of Education, 2004a). The minimum teacher:child ratio for sessional kindergartens is 1:15. Adults who are employed as teachers in this setting must have the minimum qualification of a Diploma of Teaching (or equivalent) and are referred to in this study as kindergarten teachers. In 2002 kindergarten teachers received pay parity with secondary teachers which provided them with a substantial increase in salary (May, 2005).

Kindergartens are funded by a government grant which meets most of the running costs and salaries of the teachers and staff. Any shortfalls in funding are made up by voluntary family contributions and local fundraising. Each kindergarten is part of a local association and has a committee of parents who have some responsibility for the running of the kindergarten. As well as fundraising, parents are also involved in providing voluntary parent help at the sessions (Early Childhood Development, 2001).

Home-based Services

The third early childhood setting used was home-based services. "Home-based services comprise of a cluster (network) of home-based caregivers operating under the supervision of a co-ordinator" (Ministry of Education, 2002, p.5). Adults who work in this setting have a variety of titles such as, family day care providers or caregivers, home-based educators, nanny educators and nannies. For the purpose of this study they will all be referred to as home-based educators.

A survey of the characteristics of family day care providers found that they are usually female, in the thirty year old age group (Everiss, 1999). The educational level of family day care providers is usually less than that of childcare teachers however Everiss (1999) found that the majority of them have some form of early childhood training, usually a formal pre-entry course provided by the home-based scheme. Only 9% had no training at all and 11% had a Diploma of Teaching (Early

Childhood Education) or equivalent. It is not known what the qualifications of most nannies are, but specific New Zealand nanny qualifications are either a six month course at Level 3 or a one year course at Level 5. Remuneration and conditions of employment for family day care providers and nannies differ; nannies are employees and have employment rights as per the New Zealand Employment Relations Act 2000 (Department of Labour, 2004) which includes holiday and sick leave. Family day care providers are paid on a per hour per child basis, they have no provision for holidays or sick leave and it is only since April 2004 that they have been required to pay tax on their income.

Home-based education and care can take place either in the child's own home (usually by a nanny or nanny educator) or in the educator's home (usually a family day care provider) for an agreed number of hours per week. Many of the family day care providers also have their own children present. The minimum adult:child ratio for home-based care is 1:4 with a maximum of two children under two years (Education Review Office, 1998). Approximately 9,900 children were enrolled in this service in 2004 (Ministry of Education, 2004a). Many home-based educators are employed as part of a chartered home-based early childhood education service. As part of this service programme managers pay regular home-visits to the educator and supervise the education and care being provided to the children. Those families that join the chartered home-based services receive a small subsidy from the government for the cost of their childcare, but the majority of the costs are the parent and family responsibility (Early Childhood Development, 2001).

Summary

It is intended that this small scale study will begin to provide a documented representation of the health issues for adults working in the three early childhood education settings. The three groups of adults will be referred to collectively as early childhood workers or in individual groups as childcare teachers, kindergarten teachers and home-based educators. An investigation of the health and safety of

early childhood workers within the New Zealand setting will provide useful information to begin the exploration of workplace health promotion, and workforce and retention issues of early childhood teachers. Those working on the government strategies for improving the quality of early childhood education will have access to current knowledge of health issues of importance to teachers and have a basis to work from to build a healthy satisfied workforce.

It is anticipated that employers will be interested in the outcomes of this research and be able to utilise the findings in the development of workplace health promotion. Creating a healthy, safe workplace is not only a moral issue but also a requirement by legislation according to the Health and Safety in Employment Act 1992 (Department of Labour & Occupational Safety & Health Service, 2003). The effective identification of workplace hazards requires employers and employees to work co-operatively together to create a healthy workplace. Many of the illnesses and injuries occurring in the workplace are preventable and it requires a collaborative and integrative approach to address these issues alongside the creation of a positive organisational culture of health and safety in the workplace. This will also link to the New Zealand government strategy for workplace health and safety (Department of Labour, 2005) which aims for workplaces to develop a preventive culture in this area.

Organisations involved in the education and training of adults working in early childhood education will have current information about health issues relevant to the New Zealand setting on which to base their education programmes. Emphasis can be placed on those areas of wellbeing that carry the most risk and have the most relevance within New Zealand. Identified areas of concern on health and safety issues can be incorporated into professional development programmes for trained staff.

Outline of the Study Report

There are six chapters in the thesis. Chapter 2 reviews the literature and explores the current body of knowledge about the occupational health and safety issues of adults working in early childhood education. Common ideas and themes are explored within the context of childcare centres, kindergartens and home-based care.

The research method is explained in Chapter 3, this includes how the research was designed, the participants, the variables that were measured, ethical procedures and the statistical procedures that were used to analyse the data. Chapter 4 presents the results of the study, explains the statistical analysis and significances of the findings. Demographic and work setting characteristics are provided, followed by the collation of data in the three focal areas of the study; health status, health behaviours and health concerns. In Chapter 5 there is a comprehensive discussion of the findings, with links and comparisons to the literature. The limitations of the study are also outlined.

Chapter 6, the final chapter, draws together the conclusions of the study, the recommendations for further research and suggestions for future directions.