A Multi-Method Investigation Of The Prevention And Early Active Return-to-work Safely (PEARS) Program In The Northern Health Authority

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ABSTRACT

This study is an investigation of participants' experiences with the Prevention and Early Active Return-to-Work (PEARS) program in Prince Rupert. PEARS was created by the Occupational Health and Safety Agency for Healthcare (OHSAH) in B.C. because the injury rate for healthcare workers.

Quantitative and qualitative methods were use in this study to gain a better understanding of participants' experiences with PEARS. A phenomenological qualitative orientation was used in order to expand my understanding of PEARS through the descriptions of the participants' experiences with the program.

Quantitative findings were limited to descriptive statistics because of small sample size (n=25). From the qualitative analysis, four major themes were extrapolated: perception of PEARS, perception of injury, the efficacy of PEARS' services, and the challenges of implementing PEARS in Prince Rupert. PEARS was a positive experience. However, stakeholders will have to use creative strategies to allow for the growth of PEARS.

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Chapter 1

INTRODUCTION TO THIS STUDY

Statement of the Problem

Today, the detrimental affects of musculoskeletal injuries (MSIs) are well known to both healthcare workers and their employers. Despite several different types of injury prevention programs, MSIs continue to be a common type of workplace injury in the health care industry. In the Northern Health Authority, between January 1, 2005 and June 30, 2005 MSIs accounted for 45.68% of workplace injuries and 84.44% of time loss injuries (WHITE Database, 2006). The total number of days lost due to MSIs was 1304 (WHITE Database, 2006). This amounted to 123,184 dollars in compensation costs and 34,836 dollars in medical costs.

MSIs are the leading cause of all WCB time-loss claims in the healthcare sector (Davis, Badii, & Yassi, 2004). Within the Northern Health Authority, the Northern Interior has the highest rates of time loss for both MSI and non-MSI (WHITE Database, 2006). This is not surprising as the Northern Interior has the largest workforce and man hours worked. Interestingly, the Northwest had the highest frequency of injury and ergonomic factors were reported as the most common cause of time loss injuries in the NHA (see Table 1 & 2). This category consists of five items: awkward postures, static postures, contact stress, force, and repetition. The cause of an injury is determined by the incident investigator, typically the employee's supervisor.

Table 1.

Regional Time Loss Frequency

Health Service Delivery Area	04/05 Frequency
Northeast	7.89
Northern Interior	7.70
Northwest	**8.06**
Northern Health Total	7.47

Note: Data Retrieved from WHITE Database
Frequency calculation: (Number of loss time injuries x 200,000)/ Man hours worked

Table 2.

Causes of Injury

Cause of Injury	Total Incidents	Time Loss Incidents
Ergonomic Factors	199	73
Exposure	BBF - 72, Non BBF –69	BBF – 1, Non BBF – 12
Workplace Aggression	52	6
Hit/Struck/Caught by Equipment	69	6

Note: Data Retrieved from WHITE Database
BBF: Blood and Body Fluid Exposure (ie: needle poke)
Non-BBF (ie: exposure to TB - airborne)

Conceptual Description of PEARS

In 1998, British Columbia created the Occupational Health and Safety Agency for Healthcare (OHSAH) to address the growing number of workplace health and safety issues in the healthcare industry. OHSAH is regulated by union and employer representatives dedicated to identifying and sharing best practices in healthcare (OHSAH, 2003). OHSAH's goal is to reduce workplace injuries and illness in healthcare workers and return injured workers back to work quickly and safely (OHSAH, 2003). Several health and safety programs have been established by OHSAH in order to meet this goal. Due to the rising financial and personal costs associated with MSIs in the healthcare

sector, OHSAH developed a program called PEARS, Prevention and Early Active Return-to-Work Safely.

In short, PEARS is an integrated prevention, early intervention and return to work process to support healthcare workers in BC. It is bipartite in governance and aims to improve workplace safety culture, reduce workplace injuries as well as time loss and related costs through appropriate workplace modification and accommodation, clinical intervention, and rapid evaluation. It is based on early reporting and prompt follow-up on hazards, signs and symptoms, and injuries, and is independent of the Workers' Compensation Board (P. Mah, personal communication, January 26, 2006).

PEARS programs are hospital-wide voluntary programs that serve all healthcare employees. Initially, PEARS focused solely on acute work-related MSIs because MSI costs were high and this type of injury could be addressed using prevention and early intervention approaches. PEARS is based on 20 guiding principles that were jointly developed by the healthcare unions and the employers (see Appendix A).

In the fall of 2004 there were 11 PEARS programs running in five out of the six health authorities across B.C. This study focuses on the Prince Rupert PEARS program in the Northwest Health Service Delivery Area (HSDA), which began on October 15, 2004. Prince Rupert was chosen because it had one of the highest frequencies of MSIs in the Northern Health Authority (NHA).

Prince Rupert has approximately 550 healthcare employees working at three sites: Prince Rupert Regional Hospital, Acropolis Manor (an extended care facility attached to the hospital), and the Public Health Unit. At the time PEARS was introduced, Prince

Rupert had only two full-time rehabilitation staff, they did not have an MSIP team, nor did they have access to an on-site PEARS physician.

All employees who sustained a work-related MSI from any of these sites were eligible for PEARS and were contacted as soon as possible by a PEARS staff to see if they wanted to participate in the program. As of July 2005, 40 employees had been contacted.

Purpose Statement

The purpose of this study was to assess consumer satisfaction surveys of the PEARS program in the NHA and to gain insight into participants' experiences with the PEARS program. This study consisted of a telephone survey, face-to-face interviews, and telephone interviews. The central focus of this study is on the qualitative data gathered in the interviews.

Significance of the Study

When I first started investigating PEARS there had been only one study published. This study, by Davis, Badii, & Yassi (2004), looked at the PEARS pilot year at Vancouver General Hospital. Davis et al. (2004) focused on time-loss rates and duration of time-loss. This present study intends to contribute to a better understanding of what participants' experienced while in the PEARS program in Prince Rupert.

Research Questions

From a quantitative perspective I wanted to know if PEARS had decreased the frequency and/or the duration of time-loss of MSIs for Prince Rupert healthcare workers. From a qualitative perspective I wanted to know what participants' PEARS experiences were like and what PEARS services they accessed. I asked them to describe their injury

and the circumstances that led to their injury. I wanted to know if they thought anything could have been done to prevent their injury and how they were functioning now. I also wanted to know if they would participate in this program again.

Quantitative Question: Did PEARS decrease the frequency or duration of time-loss of MSI for Prince Rupert healthcare workers?

Qualitative Question: What was the experience like for PEARS participants?

My Research Experience

My research journey began in May, 2004, as I started gathering ethics approval for my study. Later in August I drove to Prince Rupert for a Steering Committee meeting to introduce myself and to give the Committee members a brief summary of my research project. I was keen to start collecting data, but I had to wait for nearly a year before receiving the green light. Due to the various organizations linked to my research project, a large number of people got involved. This made it hard to schedule meetings and significantly increased the number of emails and phone calls that had to be made. There were several staffing changes in the NHA, OHSHA, and PEARS staff at the hospital, which also contributed to my slow start.

I finally started my data collection in September 2005 and soon found out that participants can be hard to get a hold of! I became very frustrated because I would trek all the way up to the university to make a call, arranged at the participant's convenience, only to find they would not be home. Eventually, I completed the telephone survey portion of my data collection and was ready to start with the face-to-face interviews.

Two small planes, a bus, a ferry, and a couple of taxis later, I made my way through the rain and wind to the Prince Rupert hospital. Upon arrival, I was surprised to

discover that the hospital was in the middle of major renovations and the room I was to conduct the interviews in was directly above a construction site. I had originally set-up and confirmed six interviews to be done over the course of two days. Naively, I was pretty confident that all interviewees would show up at their scheduled times because I had just called and confirmed times and location with everyone the night before. My first interviewee was a no-show. It was not until the time came and went for the second scheduled interview that I began to worry and my heart started to pound. As the minutes flew by, I wished I had had a back-up plan. Being the keen and inexperienced researcher, it never occurred to me that people would pull a no-show for a scheduled interview. When my third scheduled participant actually showed I wanted to hug her, I was so thankful! I ended up with three interviewees. The qualitative analysis process was overwhelming at the start and for the first time I was happy to have only three interviews.

After several discussions with my supervisor, it was agreed that I would complete 5 more interviews over the telephone. I was to interview PEARS staff, management, an OHSHA representative and Steering Committee members about PEARS. I had learned my lesson though and I had alternates set-up in case of cancellations. Fortunately, everything went smoothly and I was able to get 5 out of 5 interviews done during the first two weeks of March, 2006.

What did I learn from this? Always have a plan B! I could have saved a lot of time and headaches if I had had a back-up plan or a list of alternates organized beforehand for my face-to-face interviews. I would also strongly recommend limiting the number of people who have approval authority, because it can be difficult to get timely

responses from everyone. Lastly, be patient and flexible because the unexpected will happen.

Limitations of the study

The major limitations to this study were the small population (n=40), financial constraints, as well as time delays while awaiting approval from various organizations and committees to conduct the telephone surveys and the interviews.

Key Terms

The Worker's Compensation Board (WCB) of British Columbia defines a MSI as "an injury or disorder of the muscles, tendons, ligaments, joints, nerves, blood vessels or related soft tissue including a sprain, strain and inflammation, that may be caused or aggravated by work" (Occupational Health and Safety Regulation, Part 4, Section 4.46). Typically, a MSI results from overexertion and/or repetitive movements (WCB, 2002). Many risk factors are associated with MSIs such as physical force (lifting/carrying, pulling/pushing, grip, repetition, work posture, and local contact of stress), environmental factors (ergonomics, slippery floors), organizational factors (staffing levels), and the availability of equipment (WCB, 2004). Fortunately, early diagnosis and treatment of MSIs can aid in recovery and prevent long-term disability.

As previously mentioned, the intent of this study was to gain insight into participants' experiences and stakeholders' involvement with the PEARS program. The following chapter is a literature review on MSIs and best practices in prevention of MSIs in healthcare workers.

Chapter 2

LITERATURE REVIEW

Introduction

The risks of MSIs among healthcare workers, specifically lower back pain in nurses, have been studied extensively since the 1960's. The aims of this literature review are to discuss the evidence found on MSIs in healthcare workers and to discuss the various prevention and return-to-work strategies tried to date. Areas to be discussed are as follows: Methods, Current situation, MSIs & Nurses, MSIs and Physical Therapists, MSIs and Occupational Risks, MSIs and Individual Risk Factors, MSIs and Psychosocial Risk Factors, Overview of MSIs Intervention & Prevention Strategies and Best Practices, and Summary.

Methods

Due to the numerous studies focusing on workplace musculoskeletal injuries or disorders in healthcare workers, this literature review was limited by the following criteria: (1) peer reviewed articles published between 1970-to- June 2006 or reports/books written by credible authors; (2) samples consisting primarily of healthcare workers; (3) publication available in English through UNBC's library; (4) and at least one of the following words were listed as keywords: musculoskeletal injury(ies) or disorder(s), nurses, healthcare worker or hospital worker(s), prevention, early intervention or return-to-work.

Current Situation

There is no doubt in the scientific literature that musculoskeletal injuries (MSIs) are a common type of workplace injury for healthcare workers (e.g., Engels, van der

Gulden, Senden, & van't Hof, 1996; French, Flora, Ping, Bo, & Rita, 1997; Fujimura, Yasuda, & Ohara, 1995; Josephson, Lagerstrom, Hagberg, & Wigaeus-Hjelm, 1997; Niehammer, Lert, & Marne, 1994; Pike, Russo, Berkowitz, Baker, & Lessoway, 1997; Yassi, Khokhar, Tate, Cooper, Snow, & Vallentyne, 1995). The Worker's Compensation Board of B.C. cites a definition of a MSI as "an injury or disorder of the muscles, tendons, ligaments, joints, nerves, blood vessels or related soft tissue including a sprain, strain and inflammation, that may be caused or aggravated by work"(Worker's Compensation Board, 2004, p. 7). Although MSI are defined clearly, the term is often interchanged in the literature with musculoskeletal disorders (MSDs). However, "both of these terms refer to the same basic family of disorders affecting the tissues of the musculoskeletal system - tendons, muscles, ligaments, bones, nerves, and vascular structures and are usually limited to the upper extremity and lower back" (Amell & Kumar, 2001, p. 257). Thus, for the purpose of this paper, MSIs and MSDs are used interchangeably.

Typically, an MSI results from overexertion and or repetitive movements (WCB, 2004). Many risk factors are associated with MSIs such as physical force (lifting/carrying, pulling/pushing, grip, repetition, work posture), environmental factors (ergonomics, slippery floors), organizational factors (staffing levels), and the availability of equipment (WCB, 2004). In B.C.'s healthcare sector, overexertion type injuries (pushing, pulling, lifting, carrying) accounted for 68.7% of the total number of claims between 1997-2005 (WCB, 1996). In B.C.'s healthcare sector MSIs remain the number one source of time-loss claims, even though injury rates among healthcare workers have been declining in recent years (Davis, Badii, & Yassi, 2004). The high risks of MSIs in

healthcare workers has also been reported by other countries around the world such as, United States, United Kingdom, Australia, Holland, China, Sweden, Isreal, and Findland (Burton, Conti, Chen, Shultz, & Edingon, 1999; Brulin, Goine, Edlund, & Knutsson 1998; Dehlin, Hedenrud, & Horal, 1976; Ferguson, 1970; French et al., 1997; Magora, 1970; Ono, Lagerstrom, Hagsberg, Linden, & Malker, 1995; Larese & Fiorito, 1994). Amell and Kumar (2001) reported that compensable MSI costs were over $90 million in Canada for 1998. Fortunately, early diagnosis and treatment of MSIs can aid in recovery and prevent long-term disability.

These costs and injury rates are only estimates of the true costs and rates of occupational MSIs because compensable claims only account for a portion of the actual total number of MSIs (Pransky, Snyder, Dember, & Himmelstein, 1999). Other employer costs associated with MSIs are risk management costs, lost productivity, overtime associated with compensating for injured workers, work-site modification and supervision of injured workers, human resource's costs of managing injuries, and legal fees (Burton et al., 1999). Plus, injured workers and their families may experience emotional, psychological, and financial burdens (Amell & Kumar, 2001). A study by Stubbs, Buckle, Hudson, Rivers, & Worringham (1986) reported that 12% of nurses intending to leave nursing cited back pain as a main cause or contributing factor, and 50% cited back pain as their sole reason for leaving the nursing profession.

Another area of concern when investigating work related MSIs pertains to the under-reporting of work related MSIs that is believed to be occurring (Venning, Walter, & Stitt, 1987). A general consensus exists among researchers that the actual MSI costs, incidence and prevalence rates may in fact be larger than the literature suggests. It is

difficult to measure the number of MSI that are not reported. Trinkoff, Lipscomb, Geiger-Brown, & Brady (2002) found that severity of a MSI significantly influences reporting rates, the more severe the problem the more likely it is to be reported. Although under-reporting is believed to be occurring, others suggest that incident reporting has in fact increased (Silverstein & Fine, 1991). One explanation as to why incident reporting appears to have increased is the fact that general awareness about MSIs has increased and as a result MSIs are gaining sociopolitical interest (Silverstein & Fine, 1991). In addition, Erdil & Dickerson (1997) remarked that some people (for example lawyers, workers, and healthcare providers) acquire financial gains from MSIs, and these economic incentives may account for the increased reporting rates. Whether or not MSIs are increasing or decreasing, the fact remains that MSIs continue to make up the majority of time-loss claims in the healthcare industry (Yassi, Gilbert, & Cvitkovich, 2005).

MSIs & Nurses

It is well known that MSIs, especially back problems, are a major occupational injury in nursing. When nurses are compared to other occupations their prevalence rates (16.8-19.9%) are slightly higher than the prevalence of back pain in other occupations (12.3-12.8%) (Cust, Pearson, & Mair, 1972; Leighton & Reilly, 1995; Pheasant & Stubbs, 1992; Magora, 1972). Early studies suggested that the incidence rate of back pain in nurses is high (Arad & Ryan, 1986; Ferguson, 1970; Hoover, 1973; Raistrick, 1981). This is similar to more recent studies that report higher incidence rates of MSIs in healthcare workers compared to the general population and other occupations (Jensen, 1990; Meyer & Muntaner, 1999).

Among nurses, back pain is the most frequently occurring MSD, with prevalence rates ranging from 30-60% (Arad & Ryan, 1986; Cust et al., 1972; Larese & Fiorito, 1994; Lagerstrom, Wenemark, Hagberg, & Hjelm, 1995; Niedhammer et al., 1994; Stubbs, Buckle Hudson, Rivers, & Worringham, 1983; Trinkoff et al., 2002) More specifically the prevalence rate of lower back pain in nurses ranges from 34%-59% (Arad & Ryan, 1986; Engels et al., 1996; Estryn-Behar, Kaminski, Maillard, Pelletier, Berthier, Delaporte, et al.,1990; Hignett, 1996; Leighton & Reilly, 1995; Pheasant & Stubbs, 1992; Yassi et al., 1995). Although the prevalence rate of back pain in nurses is high, the prevalence rate of back pain in nursing aides appears to be higher (Jensen, 1987; Videman, Nurminen, Tola, Kourinka, Vanharanta, & Troup, 1984) Dehlin et al. (1976) reported that 46.8% of nurses aides had back pain. Nursing aides in B.C. account for 34% of serious claims in the hospital industry and 62% of serious claims from nursing homes. Respectively, strains make up 71% and 74% of the serious claims in each setting. This is similar to more recent study findings that suggest back pain in nursing aides is 77% (Fujimura et al., 1995). The differences in how studies define a case, as well as the fact that each study uses a different population sample, accounts for a large portion of the variation in the reported prevalence rates. Yassi, Cohen, Cvitkovich, Park, Ratner, Ostry, et al. (2004) have also suggested that the differences in injury rates may be attributed to the facility-specific work environments in which healthcare staff work. "Staff injury rates in intermediate care facilities are as much as 50% higher than staff injury rates in the acute care sector" (Yassi et al., 2004, p. 87).

MSIs & Physical Therapists

There is also a range of MSI prevalence rates found in the studies that investigated MSIs in physical therapists and physical therapist assistants. Holder, Clark, DiBlasio, Hughes, Scherpf, Harding, et al. (1999) reported MSI prevalence rates of 32% for physical therapists and 35% for physical assistants. This is similar to the earlier findings from Molumphy, Jensen, & Lopopolo (1985) whose prevalence rate for low back pain was 29%. Mierzejewski & Kumar (1997) had a higher prevalence rate (49.2%) of lower back pain in physical therapists. Scholey & Hair (1989) combined work related and non-work related lower back pain and reported a prevalence rate of 57%. This combined prevalence rate is similar to Molumphy et al. (1985) who recorded their combined prevalence rate at 52% for lower back pain. Once again the differences in case definitions make it difficult to make any further judgements.

Not as many healthcare studies have investigated MSIs in other anatomical sites. The prevalence of hand (5.7-22%), shoulder (19.5-53%), and neck (22.9-48%) problems in nurses has varied considerably (Ando, Ono, Shimaoka, Hiruta, Hattori, Hori, et al., 2000; Engels et al., 1996; Lagerstrom et al., 1995; Trinkoff et al., 2002). Engels et al. (1996) study found the prevalence of leg problems to be 16% with 47% of musculoskeletal problems centered around the knee. Another study by Lagerstrom et al. (1995) reported lower prevalence rates of musculoskeletal symptoms for the knee at 30%.

Pike et al. (1997) reported prevalence rates for the wrist (65%) and hand and finger (61%). The prevalence rates are higher here because the sample consisted of diagnostic medical sonographers and their job consists of scanning which they believe is

the main cause of their pain and discomfort in the wrist, hand, and fingers (Pike et al., 1997).

Discrepancies between prevalence rates can be partially explained by the fact that each study defined body regions differently and used varying criteria to define a case. For example, Lagestrom's et al. (1995) study used ongoing musculoskeletal symptoms, where as Engels et al. (1996) used musculoskeletal complaints and Trinkoff et al. (2002) divided MSD problems into two categories, symptoms (less severe) and cases (more severe). Nevertheless, these studies provide a general idea of the prevalence rates of MSDs in other body regions other than the back. However, the neck and shoulder prevalence rates are very close to the prevalence rates reported for the lower back, but due to the methological differences between the studies no direct comparisons can be made.

MSIs & Occupational Risk Factors

Occupational hazards such as physical work load, especially heavy physical work, uncomfortable postures, lifting, carrying, bending, twisting, pushing, pulling, insufficient recovery time following task completion, and static or repetitive work have been found to be risk factors for MSIs (Smedley et al., 1995; Stubbs et al., 1983). Biomechanical studies have confirmed that these tasks can generate high spinal stresses (Gagnon, Sicard, & Sirois, 1986; Garg, Owen, Beller, & Banaag, 1991). Nurses are often required to lift and move patients (heavy loads), work in awkward postures (make beds and transfer patients), and operate hazardous equipment (Allen, 1990; Brulin et al., 1998; Collins & Owens, 1996; Marras, Davis, Kirking, & Bertsche, 1999; Sosnowitz & Hriceniak, 1988).

Owen and Damron (1984) found that nurses who work directly with patients have an increased risk of injuring their backs.

Studies concerning physical therapists have reported higher MSI rates with certain work tasks such as lifting or transferring patients, treating large numbers of patients, working in awkward positions, and working in the same position for long periods of time (Estryn-Behar et al., 1990; Holder et al., 1999; Mierzejenski et al., 1997; Molumophy et al., 1985; Scholey et al., 1989). Other studies have reported that organizational factors such as management practices (Anderson, Issel, & McDaniel, 2003), and staffing levels (Cho, Katefian, Barkauskas, Smith, 2003; Harber, Billet, Vojtecky, Rosenthal, Shimozaki, & Horan, 1988; Pheasant & Stubbs, 1992; Village, Frazer, Cohen, Leyland, Park, & Yassi, 2005) are also associated with increased injuries. Village et al. (2005) found that facilities with low injury rates had a higher staffing ratio of care aides and these care aides performed fewer tasks. Another study by Yassi et al. (2004) concluded that "safer work environments are promoted by favourable staffing levels, convenient access to mechanical lifts, workers' perceptions of employer fairness, and management practices that support the care giving role." (Yassi et al., 2004, p87).

When asked, nurses reported that the cause of most severe occupational distress was lifting (65%), followed by awkward postures (47%), and stooping (34%) (Engels et al., 1996). Other significant findings from this study are that 53% of nurses reported that the ergonomic layout where they worked was poor (for example limited space between beds). Time pressures were also reported as contributing factors to the development of back pain (Engels et al., 1996). However, the debate as to how responsible the workplace is for MSIs may never be settled. While work tasks are an important contributor to low

back pain in nursing, Harber, Billet, Gutowski, SooHoo, Lew, & Roman (1983) found that only one third of nurses indicated that their lower back pain began at work.

Trinkoff et al. (2002) reported that nurses classified as MSD cases (more severe than symptoms) were more likely to modify their work, reduce non-work activities and to reduce recreation. MSD cases were also using more drugs and were three to five times more likely to have seen a doctor or healthcare provider for their problem (Trinkoff et al., 2002). It makes sense that the more severe musculoskeletal problems result in more functional consequences. Larese and Fiorito (1994) reported that 19.2% of one group of nurses and 9.1% from the other group of nurses had been away from work because of back pain. Stubbs et al. (1983) found that back pain accounted for 16.5% of sick leave, where as Niedhammer et al. (1994) reported that back pain accounted for 35.8% of sick leave. Mandel (1987) reported that the average work absence rates for low back pain was 1.5 weeks, however, the majority of nurses continued to work despite their discomfort.

MSIs & Individual Risk Factors

Studies investigating individual factors have reported mixed findings. Niedhammer et al. (1994) reported that smoking, age, perceived psychosocial factors at work, and commuting time to work might be contributing factors to back pain. On the other hand, Smedley et al. (1995) did not find that smoking was a risk factor for back pain. Being overweight was also not a significant factor for back pain for most of the studies that included weight as a variable (Engels et al., 1996; Harber et al., 1987; Niedhammer et al., 1994; Wright & Witt, 1993). Esrtyn-Behar et al. (1990) were the only ones to report a link between MSDs and workers being overweight.

Sports activities have also been investigated but results have been inconsistent. Estryn-Behar et al. (1990), Niedhammer et al. (1994), and Venning et al. (1987) found no significant association between sports and back pain, but Mandel & Lohman (1987) found a strong association between nurses who reported having lower back pain and who participated in frequent aerobic dance exercise. Yet, no association was found between lower back pain and jogging (Mandel & Lohman, 1987).

Another factor that has gotten some attention is the travelling distance between home and work. Long travel distances may also be associated with back pain (Niedhammer et al., 1994), yet Esrtyn-Behar et al.(1990) found no association.

Other areas that were examined were height, reproductivity, age, and sex. The Smedley et al. (1995) study showed a weak association between stature and back pain, where as Engels et al. (1996) and Wright and Witt (1993) showed no association. No relations between back pain and reproductive history were found by Smedley et al. (1995) and Videman et al. (1984), but Niedhammer et al. (1994) reported that the presence of children under 3 years old increased the frequency of dorsal pain. In addition, some studies show that age is not related to work related back pain (Harber et al., 1987; Wright, & Witt, 1993), while others have found a relation (Cust et al., 1972). Estryn-Behar et al. (1990) reported that age was not a significant factor until workers were over 40 years old. Niedhammer et al. (1994) did not report any significant association between age and back pain except for cervical pain, which found prevalence rates greatly increased with age in both the cross-sectional and longitudinal studies. Sex appears to be the only individual factor that researchers agree on, with no one reporting any significant differences between males and females. For all the other individual factors, the evidence

appears inconclusive. The lack of supporting evidence that links individual characteristics to MSIs suggest that screening such factors may not be effective in determining who is at greater risk for a MSI.

MSIs & Psychosocial Risk Factors

A number of studies have also found associations between psychosocial job factors and injuries in healthcare workers (Ahlberg-Hulten, Theorell, & Sigala, 1995; Estryn-Behar et al., 1990; Johansson, 1994; Josephson, et al., 1997; Koehoorn, Kennedy, Demers, Hertzman, & Village, 1999; Lagerstrom, Hansson, & Hagberg, 1998; Niedhammer et al., 1994; Yassi, Ostry, & Spiegel, 2003). Psychosocial factors such as job strain appear to be a risk factor for developing musculoskeletal symptoms (Josephson et al., 1997). This risk is even higher when physical exertion is perceived as being high (Josephson et al., 1997). Neidhammer et al. (1994) suggests that people with stress may be more prone to report their somatic symptoms. According to these results, symptoms of psychological disorders seem to be associated with back pain but are not a causal factor.

It is apparent from the literature that MSIs in healthcare are linked to a variety of factors and create numerous challenges for both the employer and employee. With this in mind, it makes sense that in order for MSI prevention and return-to-work programs to be effective in reducing the number of MSIs, time-loss absences, and associated costs programs are going to have to encompass a broad range of services. Over the years, employers have tried many different strategies to reduce the prevalence and severity of MSIs, as well as minimize the negative impact they have on their employees and the healthcare industry.

Overview of MSI Intervention & Prevention Strategies and Best Practices

Traditionally, the common approach to preventing back injuries in healthcare has been through education and training in back care, body mechanics, and lifting techniques (Yassi, Cooper, Tate, Gerlach, Muir, Trottier, et al., 2001). "Although it's widely accepted that classes in body mechanics and lifting techniques help to prevent job-related injuries, research over the past 35 years reveals that these efforts by themselves have consistently failed to reduce job-related injuries in healthcare as well as in other occupations. "Education and training alone are not effective for several reasons." (Nelson, Fragala, & Menzel, 2003, p. 33). There is a belief that the forces exerted on the musculoskeletal system from performing manual lifts is beyond reasonable limits regardless of the lifting technique used to perform a task manually (Nelson, Fragala, & Menzel, 2003). Furthermore, "teaching a proper manual lifting technique is an attempt to modify behaviour which can be difficult to achieve and maintain without long-term reinforcement" (Nelson, Fragala, & Menzel, 2003, p. 34). For these reasons and the fact that employees continue to get hurt despite continuous education and training sessions, several healthcare organizations have shifted their focus to implementing no-lift policies.

Since 1993 the United Kingdom has had success in decreasing the number of job-related injuries by prohibiting nurses from manually lifting patients (Nelson, Fragala, & Menzel, 2003). In North America the research supports the recommendation of replacing manual patient handling with mechanical lifts to reduce the MSI risk factors associated with patient handling (Engels, et al., 1998; Engkvist, et al., 1998; Marras, et al., 1999; Miller, Engst, Tate, & Yassi, 2006). Generally, there are two types of mechanical lifts, floor and ceiling. Floor lifts were first used when facilities advocated for no-manual

lifting. A recent literature review by OHSAH stated that many studies have found that the floor lifts may introduce their own safety risks: workers could trip over or run into them; lifts on wheels are not always stable, devices are bulky and difficult to manoeuvre, lifts are not always compatible with the patient's bed, and lifts are not always available to use (OHSAH, 2006). In agreement with OHSAH's literature review, other studies have found that ceiling lifts are a better alternative to the traditional floor lifts (Collins, Wolf, Bell, & Evanoff, 1999; Daynard, et al., 2001; Engst, et al., 2004; Garg et al., 1991; Ronald, Yassi, Spiegel, Tate, Tait, & Mozel, 2002;). There are several advantages for using ceiling lifts such as MSI injury rates and severity have been found to decrease (Engst, et al., 2004; Daynard, Yassi, Copper, Tate, Norman, & Wells, 2001; Yassi, et al., 2001; Zhang, Stobbe, Collins, Hsiao, & Hobbs, 2000). Implementing ceiling lift programs also saves money. Chhokar, Engst, Miller, Robinson, Tate, & Yassi (2005) conducted a three-year economic benefit study of a ceiling lift intervention and concluded that "the rapid economic gains and sustained reduction in the frequency and cost of patient handling injuries beyond the first year strongly advocate for ceiling lift programs as an intervention strategy." (Chhokar et al., 2005, p. 223).

A recent study by Yassi et al. (2001) was not able to detect any statistically significant reduction in injury rates after implementing a 'no strenuous lifting' program which combined training and assured availability of mechanical and other assistive patient handling equipment. However, this study found that their program did improve comfort with patient handling, decreased staff fatigue, and decreased physical demands. Nelson, Fragala and Menzel (2003) highlight the underlying assumption that if employers implement a no-lift policy, staff will comply and stop most manual lifting. It may be

unrealistic for employers to expect that absolutely no manual lifting will occur as ceiling lifts may not be suitable for all patient handling tasks such as repositioning patients in bed (OHSAH, 2006).

Nevertheless, "researchers have found that ceiling lifts eliminate many of the risk factors (e.g. heavy lifting, poor posture, cumulative loads) associated with patient handling and healthcare staff using ceiling lifts have found them to be safe and effective" (OHSAH, 2006, p. 5). The authors of this review concluded that "further evaluation and equipment trials are needed to better understand the impact of ceiling lifts on reducing risk of injury relative to repositioning tasks; their effectiveness in terms of the availability of ceiling lifts when and where needed; and the availability of alternate equipment such as floor lifts" (OHSAH, 2006, p. 5).

Tate, Yassi, and Cooper (1999) concluded that "focusing on reducing the perception of disability at the time of injury is critical to prevention time-loss, but once time-loss has occurred, offer of modified work and attention to pain reduction are warranted. The findings add to the evidence that workplace-based intervention programs can be effective in reducing the morbidity resulting from back injury" (Tate, Yassi, & Cooper, 1999, p. 1930). In terms of predicting time-loss their study found that modified work program, history of prior injury, and the extent of perceived pain and disability at the time of injury are more important than demographic characteristics of injured nurses (Tate, Yassi, & Cooper, 1999).

Another popular approach to reducing MSIs in the workplace are Disability Management (DM) programs. We know that "the longer an employee is absent, the less likely he or she will ever return to the workplace" (Dyck, 2000, p. 10). Therefore, it is

crucial that workplaces have early intervention and return-to-work programs. Dyck (2000) describes DM programs as "pro-active in nature and incorporate stakeholder involvement and accountability. Most are designed to control the personal and economic costs of employee injury or illness, convey a message that employees are valued and demonstrate compliance with relevant legislation" (Dyck, 2000, p. 7).

DM pioneers Jarvikoski and Lahelma (as cited in Harder & Scott, 2005, p. 21) define DM as a coordinated activity which:

- is directed toward an individual with a chronic or permanent functional limitation or disability, or an individual with symptoms indicating a risk of chronic functional limitations or disability
- is intended to restore an individual's working or functional capacity, or prevent its lowering
- includes measures aimed at developing an individual's own resources or removing obstacles imposed by the environment.

Harder and Scott (2005) list the key elements to a successful DM programme as "data analysis, solid programme design, prevention, claim initiation, claims and case management, RTW and continuous improvement. All programmes require senior management support and should be measured to demonstrate effectiveness and a return on investment".

Harder and Scott (2005) go on to say that "Once the incident or illness has occurred many strategies can be used to get the individual back into the workplace but none are as valuable as preventing the occurrence in the first place" (Harder & Scott, 2005, p. 67).

Along these same lines is the idea of stay-at-work strategies that aim at keeping an injured employee working as long as the physician has cleared the employee to work or provided the employer with the employee's physical limitation(s). This is possible in a variety of ways such as: light duties, supernumeration, job task and facility redesign, and decreased hours. It is in everyone's best interest to keep an employee at work instead of returning them to work.

"Disability management has primarily been concerned with return to work post-injury or illness. This narrow focus is expanding to include people with disabilities who have never entered the workforce and disability issues in general. Nevertheless, its strength and uniqueness derive from its activity in the workplace and its emphasis in finding solutions to disability-related issues in the workplace" (Harder & Scott, 2005, p. 3).

The research evidence from a literature review by Williams & Westmorland (2002) suggests that the following factors are important for an effective Disability management program: the workplace needs to be tied into interventions; modified work facilitates return-to-work; worksite ergonomic assessments facilitates return to work, employer participation is important during the return-to-work process; people-oriented culture and safety climates are associated with lower claims; understanding the workers' perceptions of their injury is important; smaller workplaces may not have the necessary resources to effectively manage injured workers (Williams & Westmorland, 2002).

These findings are similar to another review by the Institute for Work and Health, which focused ton workplace-based return-to-work interventions. Listed below is a summary of the recommendations for an effective workplace-based return-to-work

program based from the evidence of the quantitative studies (Workplace-Based RTW Interventions Systematic Review Group, 2004):

A. Early contact with the worker by the workplace
B. Work accommodation offer
C. Contact between healthcare providers and the workplace
D. Ergonomic worksite visits
E. Involvement of a return-to-work coordinator
F. Educating supervisors and managers
G. Increased attention needs to be given to labour-management relations and workplace culture
H. Insurance providers should consider increasing their focus on return-to-work in their case management and examine the role of supernumerary replacements

Next is a summary of recommendations from the qualitative studies are (Workplace-Based RTW Interventions Systematic Review Group, 2004):

A. Building confidence in the return-to-work process among all parties and gaining their commitment
B. Developing good relationships among unions, management and healthcare providers
C. Ensure employers, insurers, and healthcare providers provide adequate and consistent information when communicating with injured workers about returning to work
D. Demonstrate sensitivity to the needs of all parties

E. Parties need to consider the feasibility of return-to-work plan and the ability of workers to successfully negotiate the process

F. Supervisors should be included return-to-work planning and be offered related training

G. Involvement of rehabilitation and occupational healthcare providers in the return-to-work process is important

Summary

The majority of the MSI literature focused on lower back pain in female nurses. Other occupations that were investigated were nursing aides, physical therapists, physical therapist assistants, radiation therapists, and diagnostic medical sonographers, laundry workers and hospital workers in general. Numerous studies commented on the difficulties of making comparisons between research findings because researchers use different terminology. Hopefully, with a new understanding of the complex nature of MSIs, there will continue to be innovative primary prevention and return-to-work programs that take into account the numerous risk factors we know contribute to MSIs at the workplace. It is essential that the recommendations listed above are considered when developing a successful injury prevention and return-to-work program. Once a MSI has occurred, it is crucial to have all key stakeholders involved and supportive of the return-to-work process, as well as, early medical intervention by a rehabilitation team (essentially made up of a physician, physical therapist, and occupational therapist) to ensure the injured employee receives early effective treatment for their injury. Best practices cannot eliminate MSIs at the workplace but they can decrease employees' risk and minimize the

impact of the injury to both the employee and their employer. The next chapter will discuss the research methods used in this study.

Chapter 3

RESEARCH METHODS

Study Orientation

The first phase of the study consisted of a preliminary telephone survey. There was a survey for the PEARS participants and one for NHA employees who were eligible for the PEARS program but chose not to participate in the program. The telephone survey for the PEARS participants inquired about participants' injuries and their general impressions and experiences with the PEARS program in the NHA. The telephone survey for the non-participants inquired about their injuries, asked if they sought medical services for their injury, and asked why they chose not to participate in the PEARS program.

The second phase of data collection interviews engaged a sample of PEARS' participants and stakeholders to expand the understanding of their experiences with the PEARS program. The first set of interviews consisted of 3 PEARS participants, while the second set of interviews consisted of PEARS staff, steering committee members, Prince Rupert Regional Hospital management, and an OHSAH representative. The aim was to gain a better understanding of how the program works and to describe the various stakeholders' involvement with the program. In the end I interviewed 8 people, 3 PEARS participants and 5 stakeholders.

Rationale for qualitative/quantitative research

The rational for using an explanatory design includes wanting to obtain statistical, quantitative results from a sample (telephone surveys) and then to follow-up with in-depth interviews in order to expand my understanding of the PEARS program in Prince

Rupert. A mixed method design is appropriate when, "you have both quantitative and qualitative data and both types of data, together, provide better understanding" (Creswell, 2005, p. 510). However, due to the small sample size (n=25) of the telephone surveys, only descriptive data was obtained from the telephone interviews and thus priority was given to the qualitative data collected in the interviews. In qualitative studies the researcher needs to collect as much information as possible in order to provide a detailed account of the phenomenon (Creswell, 2005). Due to this shift, my study's qualitative scope had expanded from my initial proposal to include descriptions of the various stakeholders' involvement with the PEARS program, as well as gaining a better understanding of participants' experiences with PEARS.

Participants and Site

A sample of PEARS' participants and non-participants from Prince Rupert was used for this study. A PEARS' participant was defined by OHSAH in their report: "anyone who had been successfully contacted by a PEARS representative and had not explicitly refused one or more services that could assist with the prevention of, or recovery from their musculoskeletal injury" (OHSAH, 2004, p. 11). A PEARS non-participant was defined as anyone who had been successfully contacted by a PEARS representative but refused PEARS services or, when I called the participant, the participant reported that they did not participate in the PEARS program (OHSAH, 2004). In several cases it was difficult to differentiate between a PEARS participant and non-participant because in both categories several individuals had only completed an injury report form for precaution. Some PEARS' participants never saw anyone for treatment nor did they receive any PEARS services such as worksite assessment. The inclusion

criterion used for both PEARS participants and non-participants was as follows: anyone who had been successfully contacted by myself and had given verbal consent to participate in this research study.

Access and Permissions

All employees who had been contacted by a PEARS representative between October 15, 2004 and July 15, 2005 were mailed a research information package (n=40). This package contained a cover sheet outlining the research study, the telephone survey, a support letter from the participants' affiliated union, an OHSAH support letter, and a consent form (see Appendix B for a sample of the research package). This package was mailed to each participant at the beginning of October, 2005. This step was taken to allow the participants an opportunity to learn about the research study and the degree of involvement required if they chose to participate in the study. However, during the telephone surveys, several participants reported that they had not received the research package. In these cases, I took extra time to explain the research project and expectation if they chose to participate in the research study (see Appendix B for sample of research package).

Quantitative Methodology Overview

The telephone surveys consisted of 15 questions. The questions were modified from a previous telephone survey used by OHSAH to investigate employees eligible for the PEARS program at Vancouver General Hospital.

The following dimensions were represented in the survey: demographic information, injury information, consultation information, treatments actually received, and general PEARS program inquiries. Most of the questions used a five-point Likert

scale: strongly agree/always, agree/often, neutral/sometimes, disagree/rarely, and strongly disagree/never. The other questions were yes or no and the last question was open-ended (see appendix B).

Telephone Survey Procedure

After receiving ethics approval for my research study, the NHA provided me with the names and contact numbers of PEARS participants. I called participants from my research office at the University of Northern British Columbia. I began each telephone call by introducing myself and the research project. Each participant was reminded that the information they provided during the survey would remain anonymous and confidential. A consent form was completed over the phone before the surveys were completed. The telephone surveys took between 10 to 20 minutes to complete. The last question of the survey was opened ended and this accounted for the differences in the time it took to conduct the surveys.

A total of 40 participants were contacted from October 13th to 28th, 2005. Up to five attempts were made to contact each participant. Sixteen PEARS participants and nine non-PEARS participants agreed to take part in the research study (n=25 completed surveys). The participation rate for this study was 62.5%.

Quantitative Data Analysis

Data obtained from the surveys was analyzed using Statistical Package for the Social Sciences (SPSS) at the University of Northern British Columbia. Unfortunately, a very small sample was used, thus the quantitative analysis was limited to descriptive statistics.

Qualitative Methodology Overview

For the face-to-face interviews, I randomly selected six names from the 25 telephone survey participants who had indicated on their survey that they had received PEARS' services. This selection process was done because several of the PEARS' participants had only completed paper work, they did not actually receive any PEARS' services. For the interviews I needed participants who had received some form of PEARS' services. In November 2005 I went to Prince Rupert Hospital and conducted 3 face-to-face 30 minute interviews at the hospital. I had planned to conduct six interviews but three participants did not show-up for their interviews. Attempts to reschedule did not work out and thus the five stakeholders were selected for interviewing.

For the stakeholder interviews I was given a list of contacts who had been asked by PEARS staff if they would participate in the study. In February 2006, I conducted five more interviews, one face-to-face, while the other four interviews were completed over the telephone because participants were geographically dispersed across B.C. Budget and time restraints prevented me from conducting the rest of the interviews face-to-face. A total of eight interviews were completed.

Interview Technique

Open-ended interview guides were developed for the qualitative interviews. The interview guide format was chosen in order to ensure that all the main topic areas were covered. This format helped me to stay focused and to complete the interviews in a timely fashion. The PEARS participants' interviews took approximately 15 to 20 minutes, while the stakeholders' interviews varied between 15-30 minutes. Actual

wording of the questions varied slightly between interviews, as did the order of the questions to create a natural flow for the interview (see Appendix C).

I conducted 4 face-to-face tape-recorded interviews with voluntary participants. Three of the interviews were conducted at the Prince Rupert hospital at an agreed time and the fourth interview was held in Prince George. I began each interview by introducing myself and obtaining and recording consent. Initially, they were asked general questions about their jobs and their injury to help them relax and to establish rapport, but the focus of the study was on the subsequent discussions when I asked, "What was your experience with PEARS like?" Participants were asked to focus on what PEARS was like for them. I proceeded with my questions as naturally as possible. When all my questions had been addressed, the participants were asked if there was anything else they would like to add after which I thanked them for their participation and cordially ended the interview. All interviews were tape-recorded and transcribed.

Qualitative Data Analysis

The data analysis strategies outlined by Creswell (1998 & 2005) and Moustakas (1994) were followed. First, I listened to the tape-recorded interviews. Then I read and re-read the transcripts to familiarize myself with the transcripts and identify words that were repeated verbatim by the participants. From there, I began performing preliminary groupings and reduction. I labelled segments of text with codes. Next came elimination, where I removed redundancy of codes. The remaining critical incidents were clustered into themes and put together to form a general description of the phenomena (adapted from Creswell, 1998). This method of analysis is founded on the assumption that the

themes or 'essences' are already lodged within the data waiting for the objective researcher to uncover them (Rolfe, 2006).

Since the purpose of qualitative research is to describe or understand a phenomenon from the participant's perspective (Creswell, 2005), the participants are the only ones who can legitimately judge the credibility of the results because they know best the meaning they intended to convey through their responses (Carey, Morgan, & Oxtoby, 1996). Therefore, each participant was asked to review his or her own transcript via email (member checking) (Creswell, 2005). This step was taken to ensure interpretative validity. As a result, minor adjustments were made to two participants' transcripts.

External auditing was addressed by asking an external reader to conduct a second analysis on the interview transcripts (Creswell, 2005). The expectation was that she would uncover similar themes. This step was taken to guard against the introduction of subjective bias in the coding and analysis of the data. The external reader was provided with a reduced version of the transcripts for analysis because of time limitations. The external reader analyzed the transcripts by grouping similar critical incidents together and labelling them. The external reader's list of themes was similar to the list of themes the researcher identified. The theme difference for the participants' interviews was that the researcher identified 'injury' as a theme where as the external reader identified 'assessments' as a theme. The three sub-themes were labelled differently but pertained to the same critical incidents. As for the stakeholders' interviews, the external reader identified four themes, whereas the researcher had two. The four themes identified by the external reader were PEARS services, steering committee, resource gaps, and PEARS challenges. These are similar to those the researcher found. The major difference being

the researcher condensed the data into two major themes (efficacy of PEARS and program implementation challenges) with sub-themes (involvement with PEARS, steering committee, and resources) and the external reader did not.

Ethical Considerations

Before starting to collect any data, permission was obtained from the NHA, OHSAH, UNBC, as well as from the participants. Informed consent was collected with all participants before the telephone surveys and interviews. Assigning numbers to the telephone surveys and an alias to the interviews protected the anonymity of participants. Data was not shared among participants or with anyone outside my thesis committee. The following chapter includes the data analysis and discussion of the major findings.

Chapter 4

DATA ANALYSIS AND DISCUSSION

Introduction

This chapter begins with a report of the quantitative data analysis followed by a discussion. An extensive analysis and discussion of the qualitative data is next. The data obtained from the quantitative analysis was purely descriptive as a more detailed analysis of the data was limited due to the small sample size of the telephone survey (n=25).

A thematic approach was used to report the qualitative data. This approach includes an "extensive discussion about the major themes that arise from analyzing a qualitative database. Often this approach uses extensive quotes and rich details to support the themes" (Creswell, 2005, p.266). A discussion about the themes follows the qualitative analysis.

Quantitative Analysis

The participants' ages ranged from 29 to 53. There was only one male participant. Although several occupations were represented in this study, 9 nurses and 5 nursing assistants represented the two occupations with the most frequent injuries. The majority of participants worked at the Prince Rupert Regional Hospital, only two employees reported working elsewhere (both at the Prince Rupert Public Health Unit). See Appendix D for specific breakdowns of age ranges and occupations.

There was a large range (0-21 days) in the number of days it took a PEARS representative to contact an injured employee. However, 56 % of the employees were contacted between 0 and 4 days after their injury (see Table 3).

Table 3.

Number of Days Between Injury & Initial Contact by PEARS

Number of Days	0	1	3	4	5	6	7	8	9	14	21	Total
Participants	4	2	1	3	1	1	1	1	0	1	1	16
Non-participants	0	5	1	1	0	0	1	0	1	0	0	9
Total	4 (16%)	7 (28%)	2 (8%)	4 (16%)	1 (6%)	1 (6%)	2 (8%)	1 (6%)	1 (6%)	1 (6%)	1 (6%)	25

Thirteen of the participants reported their injury as being mild (52%). Of the remaining participants, 6 reported their injury to be moderate (24%) and 6 reported their injury to be severe (24%). For a further breakdown see Table 7.

Table 4.

Participants' Self-Reported Injury Severity

	Mild	Moderate	Severe	Total
Participants	8 (50%)	5 (31%)	3 (19%)	16
Non-participants	5 (56%)	1 (11%)	3 (33%)	9
Total	13 (52%)	6 (24%)	6 (24%)	25

Participants reported environmental factors as contributing the most to their injury. High workloads, lack of equipment, and patient related factors were the next highest reported contributing factors for injury. Non-participants reported patients as being the major contributing factor for their injury, followed by their environment (see Table 5 & 6).

Table 5.

PEARS Participants' Self-Reported Contributing Factors for Injury

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A	Total
Workload too high	2 (13 %)	4 (25 %)	2 (13 %)	0	3 (2 %)	5 (31 %)	16
Lack of equipment	3 (19 %)	3 (19 %)	1 (6 %)	0	4 (25 %)	5 (31 %)	16
Inadequate training	0	0	0	1 (6 %)	6 (38 %)	9 (56 %)	16
Patient related factors	5 (31 %)	1 (6 %)	0	0	4 (25 %)	6 (38 %)	16
Environmental factors	6 (38 %)	2 (13 %)	0	0	4 (25 %)	4 (25 %)	16
Other factors	4 (25 %)	3 (19 %)	0	0	0	9 (56 %)	16

Table 6.

PEARS Non-Participants' Self-Reported Contributing Factors for Injury

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A	Total
Workload too high	1 (11 %)	1 (11 %)	1 (11 %)	2 (22 %)	3 (33 %)	1 (11 %)	9
Lack of equipment	0	3 (33 %)	0	1 (11 %)	3 (33 %)	2 (22 %)	9
Inadequate training	0	1 (11 %)	0	1 (11 %)	3 (33 %)	4 (4 %)	9
Patient related factors	5 (55 %)	1 (11 %)	0	1 (11 %)	1 (11 %)	1 (11 %)	9
Environment factors	4 (44 %)	1 (11 %)	1 (11 %)	0	1 (11 %)	2 (22 %)	9
Other factors	3 (33 %)	0	0	0	0	6 (66 %)	9

The services most utilized were physicians and medications for participants and physicians, medication, and rest for non-participants (see Appendix D). The most utilized PEARS services as reported by PEARS participants was having their work tasks reviewed and equipment modifications made (see Appendix D).

Only a small portion of participants (38%) and non-participants (11%) reported that they would have liked to have had access to other services such as more

physiotherapy or massage sessions. The majority of participants (81%) and non-participants (89%) had heard of the PEARS program before a PEARS representative contacted them. The main source of information about the PEARS program came from in-services, communication material such as posters and brochures, and colleagues (see Appendix D).

In-services and communication materials (i.e. brochures, posters) were reported as being most effective for gaining information about PEARS. Half of the PEARS participants chose to participate in the PEARS program because it "sounded like a good program". The other major reason for participating was due to the fact that participants thought they had no choice (mandatory), although when asked, 94% of participants reported that they did not feel any pressure to participate in the PEARS program. Almost all (93%) of the employees felt that their workplace manager was supportive and accommodating about the PEARS program. The majority of participants (88%) said that they would recommend the PEARS program to another employee (see Appendix D).

The most commonly reported reason why employees did not participate in the PEARS program was that their injury healed before they were contacted by PEARS and therefore no services were needed. Two participants reported that they had already begun treatment with another program before PEARS had contacted them. Only one person reported not participating because of scheduling conflicts.

Quantitative Discussion

Nurses (n=9) and nursing assistants (n=5) had the highest reported MSIs in Prince Rupert. This is consistent with other studies that found high prevalence rates of MSIs in nurses (Agnew, 1987; Arad & Ryan, 1986; Engels et al., 1996; Estryn-Behar et al., 1990;

Greenough & Fraser, 1992; Harber, et al., 1988; Hignett, 1996; Leighton & Reilly, 1995; Pheasant & Stubbs, 1992; Yassi, et al., 1995a) and nursing assistants (Dehlin et al., 1976; Fujimura et al., 1995; Heap, 1987; Jensen, 1987; Videman et al., 1984).

Most of the PEARS' participants reported their injuries as being mild. There were no significant results when comparing severity of injury to time-loss or cause of injury. This is most likely due to the small sample size because we know time-loss is more probable as the severity of injury increases. The factors that PEARS' participants listed as being most significant in contributing to their injuries were environmental factors (51%), work load too high and lack of equipment (38%), and patient related factors (37%). For non-PEARS participants, patient related factors (66%) and environmental factors (55%) were the highest. This is similar to what other studies have reported (Engels et al., 1996; Village et al., 2005; Yassi et al., 2004)

PEARS appears to be contacting injured employees quickly (56% between 0-4 days after reported injury). This is crucial because we know that early contact is key to having a successful return-to-work (Dyck, 2000; Workplace-based RTW Interventions Systematic Review Group, 2004).

The most commonly reported reason why injured workers chose not to participate in the PEARS program was that their injuries were minor or near misses. Most of the non-PEARS' participants reported that they only needed rest to heal their injury and that they did not feel the need to participate in any rehabilitation services. This is unfortunate because the employee could still have benefited from participating in the PEARS program. From an early intervention point of view, having a risk assessment done before an injury occurs or after a near miss is ideal because things can be changed to prevent this

incident from reoccurring. The sample size was too small to detect any difference between participants and non-participants self-reported severity of injury. It seems that PEARS could educate the workers about the other services it offers and stress that it is not just a return-to-work program.

The medical services that PEARS' participants and non-PEARS' participants used most frequently were the physician and medication. It is important to note that the workers used their own physician or a doctor in Emergency, as at the time of the survey, the PEARS program in Prince Rupert did not have their own PEARS' physician. Work site assessments and equipment modifications (ergonomics) were the most utilized PEARS specific services. Just over a third of participants (38%) would like to have had access to other services such as physical therapy and massage therapist.

The two main reasons why participants became involved in the PEARS program are that they said it "sounded like a good program" and because they thought it was mandatory. This, of course, is not true; PEARS is a voluntary program but it appears that participants had the impression that PEARS was mandatory. Several participants stated they thought it was "just part of the package" (referring to the paper work an employee fills out when reporting an injury). However, participants also stated that they did not feel any pressure to participate in the PEARS program.

Almost all of the participants (93%) felt that their workplace managers were supportive and accommodating about PEARS. This is a crucial finding because research in this field stresses the importance of having upper management staff who support injury prevention and return-to-work programs (Anderson, Issel, & McDaniel, 2003; Dyck,

2000; Workplace-based RTW Interventions Systematic Review Group, 2004; Yassi, et al., 2004).

Qualitative Analysis

The narratives extracted from the interview transcripts highlight the experiences of the participants and stakeholders in PEARS. The interviews are separated into two main groups, the three participants and the five stakeholders, because the focus of the interviews is slightly different. The major themes that emerged from these interviews are: perception of injury, perception of PEARS experience, efficacy of PEARS services, and program implementation challenges. Sub-themes that emerged were onsite representation, injury prevention, and work safety culture, involvement with PEARS, Steering Committee, and resources. The following passages highlight their experiences.

Background of PEARS Participants

The PEARS participants in this study, Sally, Anna, and Bill, all work at the Prince Rupert Hospital. Sally has been working for 8 years and described her job as, " it's good...good, it's alright, monotonous, the same thing all the time. We are pretty busy, I work with machines and other people." She said she does a lot of lifting, sorting, pulling, and bending. She said that her injury occurred about eight months ago. Anna has been working in her position for 3 years and so far was "loving it". She works day shifts Monday-Friday, 20 hours a week. Bill has been working in his position for 16 years. When asked how he liked his job he said, "It's different. It was a learning experience coming into a hospital."

Themes from Sally's Interview

Perception of Injury.

Sally's injury caused problems for her at home and at work. However, Sally downplays the severity of her injury because she only had to take the weekend off to rest it before she was able to go back to work. It seemed important to Sally that she only had to take one sick day.

PEARS Experience.

Sally's PEARS' experience appears to be strongly linked with the rehabilitation staff she saw. Sally mentioned that it was important to her to have an onsite PEARS representative. In her statements below, when asked about her PEARS experience, what she really is describing is her interactions with the rehabilitation staff. "...they were quite attentive...they made sure things were looked at and they did quite well..." This rapport was obviously very important to Sally. They already knew one another from working in the same small hospital. Sally thought her PEARS' experience was good because the rehabilitation staff had done "quite well". Sally seemed to think that her PEARS experience would have been different if she had a more severe injury. Sally also gave the impression that she was not worthy of interviewing because," I haven't really been all that involved in it (PEARS) really...".

Sub-Theme: Injury Prevention.

Sally did not believe that anything could have been done to prevent her injury because the job hazards of repetitive lifting, bending, and pulling were a part of the job. Sally expresses an underlying tone of hopelessness. The laundry workers have been

trying to improve their working conditions for years, Sally believed things have improved somewhat, but there are still job duties that are causing problems.

Themes from Anna's Interview

Perception of Injury.

Anna downplayed the severity of her injury and appeared to feel guilty because she said she does not tolerate pain well. It seemed important to Anna that she did not lose any time from work. In these next passages, Anna describes the severe pain she was in and how she got involved with PEARS.

> Anna: Until this one day, I couldn't stand the pain anymore, it was just...too hard. And I just ended up being put on PEARS and went to physical therapy and acupuncture. I am uh still not using that wrist.
>
> Q: Oh, is it still bothering you?
>
> Anna: Well, it's not that it's bothering me, it's just with this injury I ended up changing my mouse to my left hand and I have continued since then. It is working for me, so I just haven't changed it back.

In the above narratives Anna expresses a fear of re-injury. She continues to use her left hand even though she says her right wrist is feeling better and she believes the cause of the problem, poor workstation ergonomics, has been fixed. If this were a minor injury, she would not be concerned about re-injuring herself.

Perception of PEARS Experience.

Anna seemed to think she had a no choice about consenting to participate in PEARS because it was part of the paperwork when she was completing her incident report. Anna thought that having an onsite representative was important and mentioned the convenience of having PEARS rehabilitation services on site.

When asked about follow-up or discharge, Anna could not recall any exact discharge from the PEARS program. She would see someone from the rehabilitation department in chance encounters in the hallways and have a brief discussion about her progress.

Q: And did you have any kind of discharge or follow-up afterwards?

Anna: Well…they would just ask how my wrist was doing, but that would be in the hallway or whatever, but I don't recall a follow-up visit at my station or a follow-up in that respect.

Sub-Theme: Onsite Representative.

Again, this re-emphazes the importance of having an onsite representative because participants remember these unscheduled follow-ups. The onsite representatives make the experience more personable. It appears that Anna only knew about PEARS because of where she worked, it did not seem that she had attended any of the in-services.

Sub-Theme: Injury Prevention.

Q: Do you think anything could have been done before to prevent your injury?

Anna: Oh yeah. Yes, because by reorganizing my workstation and having the wrist pad and bringing down the mouse and keyboard from the desk made all the difference.

Q: Is there any changes or anything else you would like to add to the program to make it better? Is there anything else that could be done?

Anna: I mean if there is a way of maybe bringing PEARS in…in a preventative form, then yes you would avoid these injuries from happening.

Q: Is there anything else you would like to add?

Anna: They need to continue promoting the program and have onsite representatives. People are enthusiastic at the start but that wears off and people need to be reminded about safety.

Anna continued to minimize the severity of her injury. She thinks that more prevention and continuous promotion of the program is needed. Anna strongly believed that her injury could have been prevented by having an ergonomic workstation assessment. Her remark about needing ongoing marketing of PEARS was interesting because often programs lose momentum after their initial start-up. The PEARS program in Prince Rupert had several staffing issues and a lack of onsite PEARS representatives which made it difficult to sustain the initial onsite awareness for PEARS.

Themes from Bill's Interviews

Perception of the PEARS' Experience.

Bill got involved with PEARS because he slipped in some water and hurt his knee. It was interesting to hear Bill say that strings were pulled to get him into PEARS. It looks like he believed you had to have had a WCB claim to be eligible for PEARS (which is not the case). It was harder to get a clear understanding of Bill's experience with PEARS because he kept discussing two injuries despite the fact that he reported he only saw PEARS for one of these injuries.

Sub-Theme: Work Safety Culture.

Bill has a strong sense of work safety; he is on the work safety committee at work and he reports that he stresses safety with his workers.

Q: And what do you think about PEARS and the prevention side?

Bill: Well, they're doing their best. Basically those injuries (MIS) go to the PEARS program and they help employees and work on prevention. Like the routines of what staff are supposed to do and educate them so they don't hurt themselves in the first place.

Bill believed that his injury could not have been prevented and that things like water on the floor are a part of the hazards of the job. He gave a good account of his safety beliefs, he stated that education is the best way to prevent injuries and that it may be difficult to get older staff to change their ways.

Sub-Theme: Onsite Representative.

Q: Would you have any recommendations or anything that you would like to see added to the program?

Bill: Another person locally, Prince George is too far away.

Stakeholders' Interviews

The stakeholders that participated in this study came from a variety of backgrounds and points of views. Their current positions at the time of the interviews were as follows: PEARS staff, Steering Committee members, Prince Rupert Regional Hospital management, and an OHSAH representative.

Jane's Interview

Sub-Theme: Resources.

Jane's description of PEARS was similar to how the PEARS' participants described their experience in PEARS. When asked how the program is running now, it seems that the staff changes and shortages have slowed the "momentum" of PEARS and relationships have to be re-established, which is difficult to do from a distance.

Q: And how do you feel the program is running now?

Jane: I would say that within the last couple of months it has regained some momentum; there was a change in leader. I don't think that the communication with the managers, the site managers, was as good as it probably could have been. I see it there was bit of lack of trust between the people doing the worksite assessments and managers. Someone would come and say that an employee needed a very expensive chair or whatever. I've tried to change this and once the

> worksite assessment was done, actually get the managers themselves to determine what their priorities were. I think this approach is working a little bit better.

The majority of the people who originally started as PEARS staff are no longer involved with the program in Prince Rupert. For various reasons they have all left except for Jane. Obviously, this is not an ideal situation and the program has been affected. All of the participants interviewed have commented on the staff changes or lack thereof. Jane's role with PEARS has changed slightly over time due to all of these staff changes and shortages. PEARS needs more resources in terms of staff in order to provide efficient services. As some of the participants said, the program is currently only able to offer secondary services. What this means is that workers have to get injured before they get involved with PEARS.

Efficacy of PEARS Program

> Q: Do you think PEARS is meeting the needs of the Prince Rupert hospital workers and employees?
>
> Jane: I think it is meeting the needs, but I don't think it's used as much as we would like it to be.

The benefits of smaller communities like Prince Rupert having a PEARS program are that workers do not have to leave their communities for services. Currently, PEARS is just in Prince Rupert but the NHA is trying to figure out ways to expand the services to the neighbouring communities such as Terrace.

Sub-Theme: Steering Committee.

There is a Steering Committee for PEARS but it has faced a number of challenges such as having all key stakeholders (especially management) represented at the table. There is also a lack of rehabilitation staff on the committee so as it stands right now, Jane

is the only rehabilitation staff, which made it difficult to carry out clinical tasks. It is difficult in a smaller hospital because several of the staff are already doing other voluntary positions as well.

> Jane: ... (The Steering Committee) functions have been a little hard to cover because most of the committee is comprised of nurses or support staff and as much as they are interested they are not as knowledgeable as Rehabilitation staff in terms of injuries. Nobody on the committee right now has the capacity or the scope to do a worksite assessment or physiotherapy treatments. I'm the only Rehabilitation person.
>
> Q: And the Steering Committee that you know within other PEARS, are they more Rehab focused?
>
> Jane: Yeah, they are and the nurse might be an Occupational Health nurse. And of course the other PEARS programs have got a PEARS physiotherapist, a PEARS Occupational Therapist and PEARS physician... We should have a physician too, but we have operated throughout the whole, since October 2004, without a physician.
>
> Q: So how effective then do you think the Steering Committee is?
>
> Jane: I don't quite honestly. Probably not as effective as we would want it to be because it is more of a working Steering Committee or an advisor committee.

Program Implementation Challenges.

Jane was frustrated with her inability to fix everything right away. It was hard to come into a new position where PEARS was only a part of her job. She recognizes that the PEARS program in Prince Rupert will have to follow a different model to be more effective. Everyone counted on the fact that everyone was going to be able to handle the extra workload, there were no provisions for when staff got hurt or how they would cover vacancies.

Equal access to services is a big challenge in the North. Equal access first needs to be clearly defined, because it can mean a variety of things. For instance, does this mean

everyone has the right to the same services, necessitating a specialist in every community? The concept of having outside providers seems like a quick and simple solution, except that all three PEARS' participants expressed that they really liked having the services onsite. PEARS may want to rethink this idea, especially if the intake person is based out of town, because then there is no onsite representative or services, and this is precisely what participants stated that they liked about the PEARS program.

> Q: And by sustainable model, do you mean that mostly in terms of staff so that?
>
> Jane: Well, more staff is not necessarily going to fix it. It will help, but I mean a model that is more of a sustainable framework. Whereby we're not always treating and reacting to injuries, we're trying to be proactive and preventing them from occurring in the first place. I mean injury prevention, 90% of injuries in Northern Health are WCB costs are MSI's. What we are doing right now is obviously not working. And more education and training is not going solve our problems. People don't get injured because they didn't know what to do. They get injured because the resources weren't available or readily accessible.

It was difficult for Jane to say whether or not PEARS was meeting its' objectives. The PEARS model that is run in the north will have to be different than the model that is run in the larger urban areas because the smaller communities do not have the staffing capacity to meet the needs of the program, nor do they have the same volume of injured workers, but the frequency may still be high. Stakeholders may have to decide whether it is more beneficial to target the high risk facilities or perhaps it is more cost effective to focus resources on the larger facilities.

Dave's Interview

Sub-Theme: Involvement with PEARS.

> Q: Can you talk a bit more about your specific role within PEARS?
>
> Dave: Yep, it has actually changed in the past couple of months. Originally I was I started off as an Ergonomist, working on ergonomic projects. I slowly was being pulled into PEARS to assist Laura with her PEARS task and her duties. I started

off helping to develop the tracking and evaluation system for PEARS, the PEARS WHITE database to measure PEARS successes. And then from there, I got involved in the marketing stuff and became more familiar with PEARS and its processes. And then Laura left OHSAH and I just kind of naturally filled into her position as the liaison person with the Steering Committees.

Sub-Theme: Steering Committee.

Q: Do you want to talk a little bit about how the PEARS Steering Committee works?

Dave: For all PEARS programs, the committees are composed of union and management reps as well as ex-officio members such as myself, the PEARS intervention team and other OHSAH staff. Basically they govern the operations of PEARS, they oversee the operations, the role of the program, how the program expands, lots of different roles. They may also review current participants, investigate findings from each individual case and relay information back to the managers and the supervisors of that facility to prevent that injury from occurring again. Participant names however are kept in confidence and not disclosed to the committee. The committee functions similar to how and Occupational Health and Safety committee would function.

Q: How effective would you say their Steering Committee is?

Dave: I guess they're fairly effective definitely. Anywhere in health care right now the resources are just stretched, stretched so far they can only carry out so many tasks at one time. So with PEARS program right now in Prince Rupert, because the resources are slim, the committee can only do so much. I'm also not sure if you're aware, that Northern Health is planning to expand their programs across the authority. So they've been very helpful in providing feedback within their busy case, as well as, what are the current resource issues.

Program Implementation Challenges.

It is becoming apparent that the NHA is going to have operate differently than down south in the bigger facilities. Although the Steering Committee has run into resource shortages, Dave believes that the committee is helpful.

Q: Can you tell me a little bit about the limitations?

Dave: Right now the biggest limitation is with the resources, with their resources. I guess the physiotherapist has run into the ethical questions, like who do they treat first? Do they treat staff through the PEARS program or do they treat outpatients from the public first.

Q: Can you talk a little bit about the benefits or the disadvantages of having PEARS in a rural site, maybe compared to some of the bigger sites?

Dave: Once again I guess it goes back to the resources issues. Rural areas don't have the accessibility to PEARS resources that urban areas do. Resources being shared between a variety of sites face barriers geographically and on the timeliness of interventions. Distance has been a barrier in the rural setting as opposed to an urban area where everything is centralized and is more accessible to the worker.

Q: In terms of the prevention aspect, I know at the beginning you were telling me that people initially complete an incident report and then they're followed up. What about risk management? Is there anything before people get hurt?

Dave: Ideally there should be an integration of MSIP and PEARS. Some PEARS coordinators go in and they provide educational services and workshops. (If) they see that there is an increase in reporting from a specific department, instead of providing one-on-one education with each of those workers, they probably would address the situation as a whole for that department. Maybe provide a workshop to that department and provide the intervention measures with recommendations to the department manager to make changes to all workstations within that area.

Currently it seems like the link between primary and secondary prevention is missing in Prince Rupert because PEARS is mainly acting as a secondary prevention program. That may be due to the fact that they are just getting an MSIP 'team' up and running in the north. What Dave talks about sounds good and simple, but in Prince Rupert this is not happening. Currently, PEARS is almost all secondary intervention. Staff are being helped after they complete an incident report.

Q: Do you think it is important to try to have an on site PEARS representative at each of the sites?

Dave: I think it's really important, and, and I'm pretty sure Jane would agree to as well. An onsite presence can also help prioritizes cases within PEARS and oversee the whole operation. I think it is very important. Yeah, and it's the whole philosophy of PEARS to have everything provided on site. I think that's key.

It is very interesting that Dave mentions in that last sentence that, "the whole philosophy of PEARS is to have everything on site", because Prince Rupert has really struggled with that and have not had an onsite representative for a while and have had to contract out for services because of a lack of in house resources. It is good that PEARS wants to keep everything onsite, but just how feasible that is for the smaller communities is hard to say.

> Q: Do you see the North having to come up with a little bit different model than...
>
> Dave: Uhm yeah depending on what resources are available. As well as, I guess how disperse the facilities and the locations are geographically within each of the HSDA's. Yeah, each model will probably be a bit different.

It is clear that the PEARS program that runs in the Northern Health will be different than those in the bigger centers. Although no one wants to say for sure how PEARS did in its first operational year in Prince Rupert, everyone seems to think that the program will continue. The new model for PEARS will have to be able to function with limited staff resources and cover large geographical areas.

April's Interview

Efficacy of PEARS services.

When asked about PEARS, April gave a clear answer, "It's early intervention for early return to work."

> Q: Do you understand just how the program works?
>
> April: Well how the program is theoretically supposed to work, is that it is a bipartite process through OHSAH which is the Occupational Health and Safety body for health services...and so the funding would go through them from both management and the union. And they have to develop and over see the project. They developed the data system for the project, which is called the WHITE database. Personally I have a problem with that, but...uhm hopefully we can work that part of it out.

Q: What is your concern with that? Is it with the WHITE database?

April: Yes.

Q: What's the problem with it?

April: Well my chief concern is that I fear that the management side is going to be using that database as an attendance management system. Rather than for what that was intended. I went to the rep from my union and I questioned the process and I was told, and I guess I have to believe what they tell me, that the system is...oh what do you call it? It is protected at certain levels. So information is removed and generalized before management can access it.

Q: Why? Is that to protect employees?

April: Well yeah, it is supposed to be like freedom of information and personal privacy. The program itself (PEARS), I have great faith in. I think it's a good program and I think it would work really well for both sides.

April is the first one to bring up a concern about the WHITE database and how it is being used. She has legitimate concerns and seems frustrated that she is not getting the answers she is looking for. She expresses faith in the PEARS program and how they are using the WHITE database, but she is fearful that others have access to this system and could use it for punitive purposes.

Sub-Theme: Steering Committee.

Q: Can you describe what your role is in PEARS?

April: ...My role on the Steering Committee is to make sure that their meeting the mandate of the bipartite process. That, and also in the interest of money, cause the money is helping to fund this as well.

Q: And how does the Steering Committee function right now in Prince Rupert?

April: Well we were functioning really well until we ran into this resource problem. Before we had PEARS, Northern Health had a service called Acclaim, a kind of attendance management program. And so that made me very weary, made many people very weary. My goal was to make sure we didn't end up with another Acclaim, only calling it PEARS.

> Q: And what about the Steering Committee. How does it function in Prince Rupert?
>
> April: We had to be creative to make up for the lack of members. For awhile, we were having no management representation at the meetings, just union reps, sitting around the table....with the rest of them, the OHSAH and the other people on teleconference. But on our last meeting, there were two management reps at the table, so now we seem to be getting back on track.

April is very concerned about the idea of contracting out services to private industries. Although she understands that there is a lack of resources, making it impossible to keep services internal, she fears that PEARS is going to turn into another Acclaim. She also talks about her frustrations over the lack of management representation at some of the meetings, because their presence is needed to create a quorum. Decisions cannot be voted on without a quorum. Other than the privatization and lack of management representatives, she feels the Steering Committee is functioning well.

Program Implementation Challenges.

> Q: In what ways do you think PEARS isn't meeting the needs of employees, is it just because there is a lack of resources?
>
> April: Lack of resources definitely.
>
> Q: What do you think the benefits are and some disadvantages of having the PEARS program running in a smaller site like Prince Rupert?
>
> April: The resources are really a disadvantage. That's a huge a drawback for us, a huge barrier. It is difficult to get around that barrier (recruiting new staff) because it is difficult to bring people to the North.
>
> Q: Do you think it is important to have an onsite PEARS representative for the initial intake process?
>
> April: I think that would be very helpful. And unfortunately we won't get that, the onsite PEARS representation is the person that was laid up.

April expresses concerns over staffing shortages and recruitment barriers. It seems that if the PEARS program could be fully staffed the majority of the problems

PEARS faces would go away. April also thinks that onsite representation is helpful but feels that because of the difficulty in keeping an onsite representative at the hospital there will not be one for the Health Unit, where she works.

Lisa's Interview

Sub-Theme: Steering Committee.

Q: Do you want to talk a little bit about your role within PEARS? Being on the Steering Committee?

Lisa: Steering Committee? Oh, okay. It was a pilot project, so it was a learning experience for most of us. And we discussed our functioning as a group, set out rules, expectations and we did some promoting, we do it on an individual basis, but there was an advertised promotion that we had within the facility.

It is not very clear exactly what Lisa's role is on the Steering Committee. She knows what the PEARS program is about and how it works and what the Steering Committee's role is, but she did not give a specific function that she did, other than to help promote the program.

Q: How do you think the Steering Committee is functioning?

Lisa: I think there's room for improvement.

Q: What kind of things do you think could be improved on?

Lisa: Maybe more of a proactive role.

Q: So they don't have to wait until they get hurt?

Lisa: Yeah, definitely.

Lisa stressed the importance of having a management representative at the Steering Committee meetings because they are the ones making the final decisions. She also touched upon the lack of efficacy of the PEARS program in terms of being a primary

prevention program. The way PEARS currently operates, employees are not seen until they have had an injury/incident, which is a reactive, secondary approach.

Efficacy of PEARS Services.

Lisa brings up the point that PEARS is a secondary intervention program right now. She feels it would be more beneficial if they could be more of a primary intervention program and offer services to employees before they got hurt.

> Q: How do you think the PEARS program is running right now in Prince Rupert?
>
> Lisa: I think it's running well.
>
> Q: So do you think it is meeting the needs of the Prince Rupert Healthcare workers?
>
> Lisa: Well there is a problem right now. Our physical therapy department is having staffing issues. On occasion there has not been a physical therapist for inpatients, so that means they haven't been available for outpatients for sure. And I know one or two of the PEARS clients have been seen by physical therapist outside of the hospital, private practice. The PEARS participants that were referred to a private clinic for their physical therapy had those expenses covered by PEARS.
>
> Q: Does that cause any issues?
>
> Lisa: The only problem or perceived problem was that the physiotherapist they were being referred to in private practice was the same physiotherapist they could have seen at the hospital. This could present or have the appearance of a conflict of interest.

It is interesting to note that people think that the PEARS program is running well because people are being contacted quickly after they report an injury. Again, PEARS appears to be an effective secondary program but lacking in primary prevention. She also talked about the concern around paying for private services outside the hospital. The concerns about the private practice physiotherapy and how that affects staff and the

services offered is tough. Staff want these services and currently the only way to provide them with these services is to contract out to private practice. Lisa was apologetic about not having all the answers to my questions. She stated she felt out of the loop because she had missed the last few meetings. She brought up an interesting point about confidentiality, and how some workers may, in fact, appreciate having services held off site.

Kate's Interview

Efficacy of PEARS Services.

Q: And how do you feel about how the program is running right now in Prince Rupert?

Kate: I think that it is running really well. We have the Steering Committees and we take the time to review any workplace injuries that happen, look at whether there is anything that we could have imposed or any education that could have been provided that would have prevented it. We learn from each incident and try to improve the environment that we are working in.

Q: Well good. Do you think that this program is meeting the needs of the healthcare workers there?

Kate: I think the program is meeting the needs of the healthcare workers, they're certainly aware of it.

Program Implementation Challenges.

Q: Has there been any challenges in terms of resources?

Kate: People leaving create a specific challenge because our numbers are small, any shift in our numbers causes quite a gap but resource wise,...no, I think that we've done well so far, I think one of the areas that there is always a little bit of hesitation about is the idea of whether we're going to be able to support the recommendations that PEARS makes.

Kate is referring to the trust that needs to be established between the department managers and PEARS so the recommendations made by PEARS staff will be accepted and not seen as a waste of money.

Sub-Theme: Resources.

Q: Do you want to talk a little bit about the other stakeholders who are involved in the PEARS program?

Kate: Well our rehabilitation department is absolutely key. We have quite a challenge because of the shortage of physiotherapy and occupational therapists in the country as a whole. In being able to support the program and there certainly also for some of the support staff, there is an ethical concern with the PEARS program in that there's a perception that in putting our own staff forward for sort of rapid rehabilitation that its creating a two tier level of medicine. I think to support the program fully we really do, either need to look at the feasibility of using the best use we can of whatever resources, either private or public, in supporting this. It's very difficult, it's a significant challenge in fact for the rehabilitation staff in Prince Rupert to try and absorb the additional demands

Sub-Theme: Steering Committee.

Q: Do you want to talk a little bit now about the Steering Committee in Prince Rupert and how that's been working out?

Kate: Actually the Steering Committee has been working out very well. We're actually looking for another management representative. We've been fortunate to have that because we've been a pilot site, but I think as time goes by we may be moving more to a regional PEARS committee, as opposed to a community specific site.

Q: Do you think it's important, that PEARS has an onsite representative for the initial intake process?

Kate: I would say it's absolutely critical to have an onsite champion for this process. But, it requires somebody to have the time to dedicate to the reminding people about the program, to the following up on the program, to, you know, people begin to think PEARS program. Otherwise when you delegate that sort of responsibility to any number of people, it sort of gets lost in all the other demands.

Q: Alright, so is there anything else you would like to add about the PEARS program or about your involvement in the program?

Kate: Probably not at this point, its still in early days, I think it's really an exciting program. I think that it's critical in order to create a foundation for a safe worksite. But it does need to be resourced, and it does need to be marketed pretty consistently, so I think that would probably be my key concerns at this point in time.

Kate's perception of PEARS is that it is meeting the needs of Prince Rupert's healthcare staff, despite the various resource gaps they have encountered over the past year. She expressed a number of concerns. She spoke about their lack of resources and how the already small rehabilitation staff are stretched in terms of workload. She explained how it has been difficult to absorb the extra workload of PEARS. She also mentioned the ethical dilemmas the rehabilitation staff are concerned about. They are worried that PEARS may be creating a two-tiered system between hospital employees and the general public. They cannot treat everyone so they are having to choose who to see and who to put on a wait list. Kate spoke a little about how critical it is to have an onsite 'champion' (representative). She thinks that the Steering Committee is functioning well and that in order for PEARS to continue to be effective they will need to be consistently resourced and marketed.

Qualitative Discussion PEARS Participants

The major themes that emerged from my discussions with the PEARS' participants concern the perception of their PEARS' experience and the perception of injury. The sub-themes that emerged were onsite representation, injury prevention and work safety culture.

Major Themes

Perception of PEARS experience.

When discussing PEARS, each participant described their individual experiences with PEARS. When considered together, these individual descriptions created a clear picture of PEARS and how it is running in Prince Rupert. For the most part, everyone agreed that PEARS met their needs. Each PEARS' participant had a positive experience

with PEARS and they all agreed they would do the program again if they got re-injured. Basically, their experiences consisted of reporting or seeking help for their injury, completing the necessary paperwork, seeing rehabilitation staff for treatments and worksite assessments as needed.

Two of the participants' positive experience in PEARS was tied closely to their rehabilitation staff. When asked to describe their experience they praised the rehabilitation staff for doing a good job. They also all agreed that PEARS needs to have more follow-up and a more formal discharge plan. Each participant had a difficult time remembering how or when he or she was discharged from the PEARS program. However, they did express appreciation when a rehabilitation staff member in the hall would ask them how they were doing. All three of the participants said that they would do the program again if they got re-injured.

Perception of Injury.

Two of the participants said that they had relativity minor injuries and that if their injuries were more serious their PEARS experience would have changed because they would have been more involved with the program. They gave the impression that I should have been interviewing someone with a more severe injury. This highlights the fact that PEARS needs to put more emphasis on the primary prevention aspect of the program so staff realize that near misses, minor injuries, and risk assessments are just as important to take care of as staff with more serious MSI injuries. One of the participants also spoke about the fear of re-injury.

Sub-themes.

The sub-themes that emerged from their interviews were onsite representation, injury prevention and work safety culture. It was important to all three participants that they had not lost time from work. They also both agreed that having an onsite PEARS representative is important. Each participant stated several times that they thought it was important to have an onsite PEARS representative and they liked having onsite access to services. All of the participants agreed that it is better to have an onsite representative than talking to someone long distance over the phone or via email. The participants were in favour of having services onsite, with PEARS staff on site so the intake process right through to the discharge planning could be done in person, in Prince Rupert. However, one participant commented about the benefits of having access to services offsite for confidentiality reasons, but other than that, there is strong support for rehabilitation services to remain onsite for convenience.

In terms of injury prevention and work safety culture, Bill and Sally felt there was nothing that could have been done to prevent their injuries. Bill felt his injury was an accident (slipped on some water on the floor) and Sally believed her injury was caused by the inherent risk factors of her daily job tasks that could not be avoided. Anna, on the other hand, felt that her injury could have been prevented if she would have had a worksite assessment to correct her workstation.

Qualitative Discussion Stakeholders

Major Themes and Sub-themes.

Efficacy of PEARS services

Although no one would say for sure, because the official PEARS report had not been completed, they all agreed that PEARS appears to be meeting the needs of the healthcare staff in Prince Rupert. Most of the stakeholders discussed the fact that although PEARS claims to be a primary prevention program, in reality it operates as a secondary prevention program because employees only get enrolled in PEARS after their incident. As a secondary program, the stakeholders believe it is functioning effectively, especially considering the resource gaps they are challenged with. However, several of them stated that they would like to see the program operate as a primary prevention program while maintaining the quality of the secondary program that has been established.

Sub-Theme Involvement with PEARS

Most of the stakeholders' experiences or role with PEARS is limited to their involvement with the Steering Committee. Jane's role with PEARS is more in-depth because she is acting as the initial intake person because of staffing shortages as well as being on the Steering Committee.

Sub-Theme Time Commitments

All the stakeholders commented on how they are doing several extra voluntary positions such as being involved with PEARS, as well as working full time. They all are keen and supportive of the PEARS program, but they are all doing a lot of things and therefore do not always have a lot of time to spend on PEARS.

Sub-Theme Steering Committee

From a management, OHSAH, and union point of view, the Steering Committee is running well. Each interviewee mentioned the difficulties of trying to have all parties represented at each of their monthly meetings because members are often covering several other positions as well. Although this poses challenges, they all stressed the importance of having both management and union representation at each meeting. Jane, however, feels that the committee is not as effective as it could be. Currently, she is the only rehabilitation staff on the committee and therefore has no one to help her with clinical tasks such as discussing cases and worksite assessments. She expressed the need to have more rehabilitation staff on the committee but the problem is that right now, Prince Rupert simply does not have enough staff for this to happen.

Program Implementation Challenges

Sub-Themes Resources

All the stakeholders commented on the staffing shortages and how that had been a challenge to implementing the PEARS program in Prince Rupert. The PEARS program in Prince Rupert is no longer able to have internal physiotherapy or onsite representation, which is unfortunate because all stakeholders agreed that this was important. There have also been several staffing changes which have affected the way PEARS is operating. Participants spoke about a loss in momentum when the program lost key players. Having sufficient staff to effectively run a program is crucial but retention of staff is just as important in order to have sustainability of the program.

Participants talked about the perception that the public and staff have about priority treatment. Some think that staff are able to jump the waiting list for

physiotherapy treatment when they get injured. It sounds like the rehab staff may have been put in a position to choose whom to treat because their workload had increased with the introduction of PEARS and they could not treat everyone immediately. There is also concern about contracting out to private practice. These issues will be hard to address because it is difficult to recruit rehabilitation staff to the North since they are generally needed throughout the province.

PEARS was a positive experience for participants and stakeholders. The major challenges for the NHA will be to overcome the resource gaps and to develop a different model in order for PEARS to operate effectively as a comprehensive disability program. PEARS' stakeholders need to ensure this new model is sustainable for the smaller rural sites found in the NHA. The last chapter consists of the summary, conclusion, and recommendations.

Chapter 5

SUMMARY, CONCLUSION, & RECOMMENDATIONS

Summary

The rational for using a mixed method design includes wanting to obtain statistical quantitative results from a sample (telephone surveys) and then to follow-up with in-depth interviews in order to expand my understanding of the PEARS program in Prince Rupert. Due to the small sample size (n=25) of the telephone surveys, priority was given to the qualitative data collected. Originally, I had planned to interview only PEARS participants and non-PEARS participants but due to small participation rates (n=3) for the interviews, I expanded my initial proposal to include 5 interviews from various stakeholders to discuss their involvement with the PEARS program in Prince Rupert. My supervisor and I felt that this would compliment the initial 3 interviews I had conducted. We believed that these 8 interviews would provide enough data to gain a better understanding of how the PEARS program runs and what participants experienced while in PEARS.

Even though generalizations cannot be made from this study, the results were very similar to other studies. The majority of the PEARS' participants reported their injuries as being mild. The most commonly reported reason why injured workers chose not to participate in the PEARS program was that their injuries were minor and they did not feel the need to participate in any rehabilitation services. This is similar to Ouellette, Badii, Lockhart, & Yassi (2007) study findings that the most common reason for non-participation was perception of the injury as minor and that PEARS participants accessed significantly more resources than non-participants.

The factors that PEARS' participants listed as being most significant in contributing to their injuries were environmental factors (51%), work load too high and lack of equipment (38%), and patient related factors (37%). For non-PEARS participants patient related factors (66%) and environmental factors (55%) were the highest. This is similar to what other studies have reported (Engels et al., 1996; Village et al., 2005; Yassi et al., 2004)

Almost all of the participants (93%) felt that their workplace managers were supportive and accommodating about PEARS. This is a crucial finding because research in this field stresses the importance of having upper management staff who support injury prevention and return-to-work programs (Anderson, Issel, & McDaniel, 2003; Dyck, 2000; Workplace-based RTW Interventions Systematic Review Group, 2004; Yassi, et al., 2004).

Although PEARS is thought of as an effective program, it was missing a key component, primary prevention. The PEARS participants' commented on the fact that their injuries were not serious injuries and therefore I should be interviewing someone who has had a more severe injury because the greater the severity of injury, the more services the participant would receive. This notion is true in the sense that a participant with a severe injury will have a longer recovery time, but if PEARS had a true primarily prevention component employees who have never been injured would be engaged in the program just as much as employees who have been hurt. The difference would be in the types of services they would receive. If PEARS only sees employees after a reported incident they are not practicing primary prevention.

Ideally, PEARS wants to intervene before an injury occurs. Educational in-services, worksite risk assessments, work task redesign, ergonomic assessments, and equipment recommendations (ceiling lifts, beds, & mattresses) are examples of primary prevention services that could be offered. However, PEARS will never be able to eliminate all injuries, and thus it is important to have not only a primary component to its' program, but also secondary and tertiary components as well.

It is also apparent that the PEARS program in the Northern Health Authority is going to have to follow a different model than the other HSDA's in the south. PEARS' stakeholders need to find a way to close the resource gap that currently exists in the North. More PEARS staff is needed if the program is to actually have a primary prevention component with an onsite PEARS representative. With limited rehabilitation staff it may not be feasible to have onsite PEARS services in every community, let alone in every facility. Although onsite services are preferred by employees, for the remote communities in the North this is not possible and other alternatives will have to be explored. A major focus needs to be on recruitment and retention of PEARS staff in order to sustain the program in the North. This could be very challenging as rehabilitation staff are needed across B.C.

The small sample size limited what could be done with the quantitative data. There was also a considerable length of time between the participants' experience in PEARS and the interview, so recall may have introduced some bias into the interviews. Ideally, it would have been better to talk to participants as they went through the program and to have more than just one interview with each participant. My own inexperience with interviewing and analyzing transcripts may have also introduced some biases. I tried

to ask open-ended questions and extract the major themes and experiences from the transcriptions while staying as close as possible to the participants' own words, thoughts, and meanings.

Future research warrants a larger study in hopes of obtaining a larger sample. Future studies could also seek to clarify the meanings that emerged from the language participants used to describe PEARS and their injuries, and the contexts within which such descriptions are embedded. This would require a broader focus than the one I used for this study.

Other areas that can be explored are the effectiveness off-site injury prevention programs in isolated communities with limited resources. A cost analysis of contracting out to private industry and travel costs for specialist appointments and assessments such as a functional capacity evaluation would also be very beneficial to the Health Authority.

Conclusion

The main contribution of my study comes from the qualitative data I collected during the interviews. I tried as much as possible to ask open ended questions and to let the interviewees speak about their PEARS experience using their own words and memories. I was not able to answer my quantitative research question, did PEARS decrease the frequency or duration of time-loss of MSI for Prince Rupert healthcare workers, because my sample size was too small. As for my qualitative question, what was the experience like for PEARS participants? The PEARS experience for participants consisted of reporting or seeking help for their injury, completing the necessary paperwork, seeing rehabilitation staff for treatments and worksite assessments. There was

no formal discharge or follow-up. Participants felt that it met their needs and said they would participate in the program again.

The stakeholders experience in PEARS consisted mostly of being a member of the Steering Committee, which was difficult time commitment for most of them. They all commented on the fact that although PEARS claims to be a primary prevention program, in reality it operates as a secondary prevention program. As a secondary program, the stakeholders believe it is functioning effectively, especially considering the resource gaps they are challenged with. Overall PEARS was a positive experience for participants and created strong collaborative working relationships amongst stakeholders.

Recommendations

The NHA is challenged by its' large geographical area and smaller, isolated communities. While PEARS programs elsewhere are planning on expanding to cover all types of injuries, including mental health, it will be difficult for the NHA to run a comprehensive program effectively with the existing limited resources. Committees will have to decide if they want to target facilities with the highest incident rates (typically the larger facilities with more employees) or highest frequency (high risk facilities). The PEARS program in the NHA has to be careful it does not expands beyond its' capacity to offer effective interventions. Stakeholders are also going to have to be creative in the way their limited resources are allocated to allow for the growth of PEARS into a comprehensive and fully integrated disability management program.

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APPENDIX A

PEARS 5 Objectives:

1. To decrease the frequency of time loss musculoskeletal injuries in health care.
2. To decrease the duration of time loss musculoskeletal injuries in health care.
3. To decrease the resulting disability of time loss musculoskeletal injuries in health care.
4. To identify and evaluate critical success factors of prevention and safe early return to work.
5. To promote a workplace culture that fosters the primary prevention of workplace injuries.

PEARS 20 Principles:

1. Preventing disability must be seen as an extension of preventing the injury.
2. The focus of post-injury intervention must be on workplace assessment and modification.
3. All modified work assignments must be meaningful.
4. PEARS should build on previous experiences within the workplace.
5. There must be an evidence-based education component and communication plan delivered for each of the stakeholder groups.
6. There must be recognition of and respect for existing patient-doctor relationships.
7. PEARS must be entirely voluntary.
8. PEARS must be designed for rapid intervention.
9. PEARS should be independent of WCB claims processing.

10. Income continuity as part of PEARS should begin upon the injured worker's entrance into PEARS and continue as long as the worker is participating in PEARS.
11. Provisions should be made for in-house rehabilitation wherever possible, either on-site or organized away from the workplace.
12. Union representative must be involved in all stages of the design and implementation of PEARS, including decisions regarding modification for the injured worker.
13. The types of injuries to be the focus of intervention should initially be acute musculoskeletal injuries.
14. The scope and parameters of PEARS should be as broad as possible, within the confines of the resources available.
15. All injuries must be carefully tracked, and outcomes clearly identified.
16. OHSAH will provide technical assistance.
17. OHSAH will be actively involved in all stages of evaluation.
18. OHSAH will provide technical assistance in procuring needed equipment.
19. OHSAH funding will be used primarily for hiring qualified individuals to lead and co-ordinate integrated prevention and return-to-work efforts.
20. OHSAH funding will be provided on a "matching" contribution-in-kind basis.

APPENDIX B

Research Information Sheets

Researcher's name: Elisha Williams

Supervisor's name: Dr. Henry Harder
Associate Professor
Chair, Disability Management
Chair, Psychology
University of Northern British Columbia

Title of project: A Multi-Method Evaluation of the PEARS Program in the Northern Health Authority

Type of project: Thesis

Purpose of research: The purpose of this study is to evaluate the effectiveness of the PEARS program in Prince Rupert, Northern Health Authority.

Participants will be asked to: Complete a telephone survey (approximately 10 minutes) and possibly (if randomly selected) participate in a recorded interview (approximately 60 minutes) regarding their experiences in the PEARS program. Interviews will be held in a convenient agreed upon location in Prince Rupert.

Potential risks? Participation in this research study is considered **"Minimal Risk"**. This means that potential subjects can expect the probability of possible harm to be no greater than those encountered in their everyday life that relate to this research project.

How are participants chosen? All employees eligible for the PEARS program will be mailed the research information sheets informing potential participants of the research study. The researcher will then follow-up the mailings with a telephone call to ask people if they wish to participate in this research study.

Who will have access to participants' responses? Only the researcher and the project supervisor will have access to the personal information collected. All information will be kept confidential and anonymous.

How is confidentiality addressed? Research data will not be linked to a participant's personal identity. The names of the participants will be removed from the actual data that is obtained and labeled with identification numbers. Names that are recorded during an interview will not be transcribed. No names will appear on any documentation. A code sheet will be kept locked in a cabinet, with only the researcher and the project supervisor having access to it

Is there payment for participation? No, participation in this study is voluntary. Participants have the right to withdraw at any time during the research study. Please note that participation in this research project will not affect you in any way.

Right to Withdraw from Study: Subjects will be informed of their right to withdraw from the study before the telephone survey begins. Data from any participant wishing to withdrawal from the study will be removed from the study. If there are a large number of dropouts, a random sample may be selected for demographic analysis only (to see if any similarities exist). All data will remain confidential.

How information is stored and for how long: Data collected from this research will be used only for the purposes of this study. Data will be kept in a locked filing cabinet or on a secure computer. No one other than the researcher and project supervisor will have access to the participant's personal information. Once the research is completed (approximately 1 year) all personal identity information will be destroyed. All other data will be kept in a secure file cabinet for approximately 3 years and then destroyed.

How to get copy of the research results: Please contact Elisha Williams if you wish to have a copy of the research results. Contact information is listed below.

Please be aware that the NHA has given permission to a PEARS representative to release the names and telephone numbers of eligible PEARS participants to the researcher. The researcher will be contacting potential research participants via telephone (after they have received a copy of the Research Information Sheets and Verbal Consent form for the Telephone Survey) to ask if they wish to participate in the research study described above. The researcher will identify herself on the phone and ask individuals if they wish to participate.

*** If you wish to participate you are giving verbal consent to conduct the telephone survey. Before conducting the telephone survey, the Verbal Consent form for the Telephone Survey will be read to you over the phone and signed by the researcher. By verbally agreeing to participate in this research study you are giving permission for the following personal information to be securely released to the researcher from the NHA's WHITE database: sex, age, occupation, worksite location, injury information (type, time loss, WCB claim), length of time between injury and first contact with PEARS, services utilized through PEARS.

*** If you do **NOT** want to participate in the research project you can decline to participate when the researcher asks you if you want to participate. The researcher will not pursue anyone who refuses to participate in this research study and will immediately remove his or her name and contact information for the contact list.

For more information about the research project or if you have any other questions or concerns please contact Elisha Williams

Phone: (250)-960-5105
email: willia2@unbc.ca

If you have any complaints about the research study please contact the University of Northern British Columbia Vice-President of Research: (250) - 960-5820.

Verbal Consent for the Telephone Surveys

Do you understand that you have been asked to be in a research study?	Y	N
Do you understand the risks involved in participating in this study?	Y	N
Have you had an opportunity to ask questions and discuss this study?	Y	N
Do you understand that you are free to refuse to participate or to withdraw from the study at any time? *You do not have to give a reason and it will not affect you in any way.*	Y	N
Has the issue of confidentiality been explained to you?	Y	N
Do you understand who will have access to the information you provide?	Y	N
Do you give permission for the following personal information to be securely released to the researcher from the NHA's WHITE database: name, sex, age, occupation, worksite location, contact telephone number, injury information (type, time loss, WCB claim), length of time between injury and first contact with PEARS, services utilized through PEARS.	Y	N
Do you understand what verbal consent is and that I am recording your consent?	Y	N

I believe the person understands what is involved in the study and voluntarily agrees to participate.

_____ _____

Signature of Investigator Date

_____

Name of Research Participant

Informed Consent for the Face-to-Face Interviews

To be completed by research participant

Do you understand that you have been asked to be in a research study?	Y	N
Have you read and received a copy of the attached information sheet?	Y	N
Do you understand that the research interviews will be tape recorded?	Y	N
Do you understand the risks involved in participating in this study?	Y	N
Have you had an opportunity to ask questions and discuss this study?	Y	N
Do you understand that you are free to refuse to participate or to withdraw from the study at any time? *You do not have to give a reason and it will not affect you in any way.*	Y	N
Has the issue of confidentiality been explained to you?	Y	N
Do you understand who will have access to the information you provide?	Y	N

This study was explained to me by: _____
Print Name

I agree to take part in this study: _____
Signature of Research Participant ***Date***

_____
Printed Name of Research Participant

I believe that the person signing this form understands what is involved in the study and voluntarily agrees to participate.

_____ _____
Signature of Investigator Date

Telephone Survey for employees who chose to participate in the PEARS program

INJURY INFORMATION	
1. I understand you had a single sprain or strain injury. Is this correct? **If no**, how many sprains or strains did you have while you were in PEARS?_____	[Y N]
2. How severe was your injury?	I. mild II. moderate III. severe
3. a) Did you lose any time from work? **If yes**: i) When you returned to your regular duties and hours, did you have any signs or symptoms of your injury? a) Yes i) mild ii) moderate iii) severe b) No c) Not applicable (i.e. I have not returned to my regular duties and/or hours) ii) Did you use any sick days, vacation time, or take a leave of absence to recover from your injury? **If yes**, specify type of leave and # of days _____ b) Was a WCB time loss claim accepted?	[Y N] [Y N] [Y N]

CONTRIBUTING FACTORS OF INJURY	
4. I am interested in the **cause** of your sprain or strain injury. I'm going to list possible **reasons for your injury**. For factors that contributed to your injury please indicate if you feel they were dealt with successfully. **1 is strong disagree** they have been dealt with successfully **5 is strongly agree** they have been dealt with successfully	
a) Workload too high	[1 2 3 4 5 NA]
b) Lack of equipment or equipment in poor	[1 2 3 4 5 NA]

condition	
c) Inadequate or inappropriate training	[1 2 3 4 5 NA]
d) Patient related factors	[1 2 3 4 5 NA]
e) Environment factors (slippery floor, limited space) _____	[1 2 3 4 5 NA]
f) Other _____	[1 2 3 4 5 NA]

5. I am now interested in what **you actually did** to help yourself feel better, return to work, and prevent the injury from re-occurring. I'm going to list possible services or treatments you may have had to help you recover from your injury?

1 is strong disagree they were successful in treating injury
5 is strongly agree they were successful

PEARS services utilized:

a. I had **the way** I do my work tasks reviewed and / or modified (Work site Assessment)	[1 2 3 4 5 NA]
b. I had **the equipment** I use modified and / or new equipment was purchased for me (Ergonomic assessment)	[1 2 3 4 5 NA]
c. I had physiotherapy through PEARS	[1 2 3 4 5 NA]
d. I had a splint made for me (OT splinting)	[1 2 3 4 5 NA]
e. I participated in 1 or more educational inservices	[1 2 3 4 5 NA]
f. I had 1 or more 1-on-1 education sessions	[1 2 3 4 5 NA]

Other professionals consulted:

g. I saw my own physician	[1 2 3 4 5 NA]
h. I had massage treatment	[1 2 3 4 5 NA]
i. I had chiropractic treatment	[1 2 3 4 5 NA]
j. I educated myself through books, television, etc. on my injury	[1 2 3 4 5 NA]
k. I had alternative medical treatment (Acupuncture/Herbalist/Osteopath)	[1 2 3 4 5 NA]
l. I took over the counter medication	[1 2 3 4 5 NA]
m. Other _____	[1 2 3 4 5 NA]
6. Are there any other services or treatments you would have liked to have accessed but were not available to you?_____	[Y N]

About the PEARS program in general	
7. Had you heard of PEARS – the Prevention and Active Return-to-Work Safely program before PEARS contacted you?	[Y N]
8. Where did you gain the most information about PEARS? **a. Manager** **b. Colleagues** **c. Communications Material (i.e. Posters up in the hospital, brochures, etc.)** **d. Other _____**	[a b c d]
9. Why did you choose to participate in PEARS? a. I thought I had no choice **b. A work colleague recommended PEARS to me** **c. I felt pressured from management** **d. I was interested in receiving free physiotherapy** **e. I thought it sounded like a good program** **f. Other reason, _____**	[a b c d e f]
10. Did you complete the PEARS discharge form and follow-up questionnaires? **a. All of them** **b. Some of them** **c. None**	[a b c]
Some of these questions may be an overlap if you completed the discharge questionnaire and for that I apologize. Please rate your response to the following questions on a 1 to 5 scale. 1 meaning strongly disagree 5 meaning strongly agree	
11. Was your workplace manager supportive and accommodating about PEARS?	[1 2 3 4 5 NA]
12. Did you feel pressured to participate in the PEARS program?	[1 2 3 4 5 NA]
13. Did you feel free to express any concerns or questions you had?	[1 2 3 4 5 NA]
14. You would recommend PEARS to other employees?	[1 2 3 4 5 NA]
15. Do you have any other comments about how satisfied or dissatisfied you were with the PEARS program? (i.e. changes you would like to see PEARS incorporate) Please explain: _____ _____ _____ _____	

Telephone Survey for employees who chose NOT to participate in the PEARS program

INJURY INFORMATION	
5. I understand you had a single sprain or strain injury. Is this correct? **If no**, explain: _____	[Y N]
6. How severe was your injury?	I. mild II. moderate III. severe
7. a) Did you lose any time from work? **If yes**: j) When you returned to your regular duties and hours, did you have any signs or symptoms of your injury? a) Yes i) mild ii) moderate iii) severe b) No c) Not applicable (i.e. I have not returned to my regular duties and/or hours)	[Y N]
ii) Did you use any sick days, vacation time, or take a leave of absence to recover from your injury? **If yes**, specify type of leave and # of days _____	[Y N]
b) Was a WCB time loss claim accepted?	[Y N]

CONTRIBUTING FACTORS OF INJURY	
8. I am interested in the **cause** of your sprain or strain injury. I'm going to list possible **reasons for your injury**. Please indicate if you feel these factors are still an injury risk for your job. **1 is strong disagree** this factor is still a contributing factor for injury **5 is strongly agree** this factor is still a contributing factor for injury	
g) Workload too high	[1 2 3 4 5 NA]
h) Lack of equipment or equipment in poor condition	[1 2 3 4 5 NA]

i) Inadequate or inappropriate training	[1 2 3 4 5 NA]
j) Patient related factors	[1 2 3 4 5 NA]
k) Environment factors (slippery floor, limited space)	[1 2 3 4 5 NA]
l) Other _____	[1 2 3 4 5 NA]

9. I am now interested in who you consult concerning your sprain or strain injury. What did you do to help yourself feel better, return to work, and prevent the injury from re-occurring.

1 is strong disagree they were successful in treating my sprain or strain injury

5 is strongly agree they were successful.

n. I did nothing, my injury healed on its' own	[1 2 3 4 5 NA]
o. I had rest/time off	[1 2 3 4 5 NA]
p. I had the way I do my work tasks reviewed and / or modified	[1 2 3 4 5 NA]
q. I had the equipment I use modified and / or new equipment was purchased for me	[1 2 3 4 5 NA]
r. I had my hours and / or duties modified	[1 2 3 4 5 NA]
s. I saw a physician	[1 2 3 4 5 NA]
t. I saw a physiotherapy	[1 2 3 4 5 NA]
u. I saw an occupational therapist	[1 2 3 4 5 NA]
v. I had massage treatment	[1 2 3 4 5 NA]
w. I had chiropractic treatment	[1 2 3 4 5 NA]
x. I educated myself through books, television, etc. on my injury	[1 2 3 4 5 NA]
y. I had alternative medical treatment (Acupuncture/Herbalist/Osteopath)	[1 2 3 4 5 NA]
z. I took over the counter medication	[1 2 3 4 5 NA]
aa. Other _____	[1 2 3 4 5 NA]
bb. Nothing has changed, I'm still injured	[1 2 3 4 5 NA]
10. Are there any other services or treatments you would have liked to have accessed but were not available to you?_____ _____	[Y N]

About the PEARS program in general:	
11. Had you heard of PEARS – the Prevention and Active Return-to-Work Safely program before PEARS contacted you?	[Y N]
12. I understand you did not take part in PEARS. Why did you choose not to participate in PEARS? (circle all that apply) a) Because of my daily commute, I felt the PEARS site was inconvenient b) Their hours did not match my schedule c) I was unable to get away from work d) I didn't think that my manager would support my participation e) I thought I would have to pay for physiotherapy f) I thought I would just be forced back to work before I was ready g) I had already began treatment (physiotherapy, massage, chiropractic) prior to being contacted by PEARS h) I prefer to attend private treatment (physiotherapy, massage, chiropractic) i) Other _____	

OHSAH

OHSAH's Support Letter

July 6, 2005

Dear worker who has sustained a musculoskeletal injury:

The Occupational Health and Safety Agency for Healthcare in BC (OHSAH) was created to reduce injuries and time-loss in health care and to improve working conditions for healthcare workers. One of the pilots funded last year at Northern Health by OHSAH was PEARS (Prevention and Early Active Return-to-work Safely). Its aim is to prevent musculoskeletal injuries (MSIs) and through workplace modification, to prevent further injury and/or assist workers to return to work safely.

In an attempt to improve the services offered in Northern Health, we would very much appreciate your assistance. A skilled researcher based at the University of Northern British Columbia (UNBC) will contact all those workers who were injured with a musculoskeletal injury between October 15th, 2004 to July 15th, 2005. The interview: which will take place at some point over the next month or so- will take no longer than 10 minutes and can be done by phone either at your home or at work if you so desire. You will be called at home to book a convenient time. If you choose not to participate, please feel free to indicate this when the interviewer contacts you. Included in this package is a copy of the interview questions.

As confidentiality is of the utmost importance, please be reassured that your identity will not be revealed. In fact, no individual data will ever be shared with other stakeholders – only grouped information that prevents identification of individuals will be shared. Your feedback will be utilized to gain insight into how the injury prevention process is currently working for you and how satisfied you were with whatever services you chose to access after you were injured.

This effort is supported by both your union and your employer. Collectively, we hope to improve the working environment and reduce the risk of injuries to workers. Your input is critical for the improvement of existing services as well as the development of new ones.

If you have any further questions, feel free to contact Elisha Williams at UNBC 250-960-5105 or Jennifer Wade at OHSAH, 1-788-328-8013. We thank you in advance for our contribution to making healthcare a healthier place to work!

Yours sincerely,

Maziar Badii MD, MHSc, FRCPC
Director – Musculoskeletal Injury and Disability Prevention,
Occupational Health and Safety Agency for Healthcare in BC
Clinical Assistant Professor of Medicine
Division of Rheumatology, Department of Medicine, UBC
Research Scientist, Arthritis Research Centre of Canada

APPENDIX C

Interview Questions for PEARS Participants

*used to guide discussions during individual interviews

Can you tell me about yourself?

Can you tell me about your injury? How did you get hurt?

Describe how severe your injury was

Do you think anything could have been done to prevent your injury?

What was your PEARS experience like?

How did you get involved with PEARS?

Can you describe what PEARS did for you?

How did they initially contact you?

What was the discharge process?

What was the follow-up?

How is you injury now?

Is there anything else you would like to add?

Interview Questions for PEARS Stakeholders

* used to guide discussions during individual interviews

Can you tell me about yourself?

Can you describe how the PEARS program works?

Tell me about your role within PEARS?

Who are the other stakeholders involved with the PEARS program?

How do you feel the PEARS program is running?

Do you think PEARS is meeting the needs of Prince Rupert's healthcare workers?

What are the benefits/disadvantages to having PEARS in a rural site?

How effective is the PEARS steering committee?

Do you think it is important to have onsite PEARS representatives?

Is there anything else you would like to add?

APPENDIX D

Telephone Survey Data

Table 1. Demographics

	Sex		Age		
	Female	Male	25-35	36-45	46-55
Participants	15 (94%)	1 (6%)	3 (19%)	6 (38%)	7 (44%)
Non-participants	9 (100%)	0	3 (33%)	2 (22%)	4 (44%)

Table 2. Occupations

	Participant	Non-Participant	Total
Admin. Assist	3	0	3
Advocate	0	1	1
Cleaner	1	0	1
Community Health Worker	1	0	1
Food Services	0	1	1
Laundry Worker	1	0	1
Maintenance Supervisor	1	0	1
Medical Technician	1	0	1
Medical Radiograph Tech.	1	0	1
Nurse	4	5	9
Nursing Assist.	3	2	5

Table 7. Frequency of Services Used by PEARS Participants

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A	Total
Work tasks reviewed	4 (25 %)	3 (19 %)	2 (13 %)	0	1 (6 %)	6 (38 %)	16
Equipment modified	2 (13 %)	2 (13 %)	0	0	4 (25 %)	8 (50 %)	16
Physiotherapy	2 (13 %)	1 (6 %)	1 (6 %)	1 (6 %)	1 (6 %)	10 (63 %)	16
Occupational therapy	2 (13 %)	1 (6 %)	0	0	0	13 (81 %)	16
Educational in-services	1 (6 %)	0	0	0	0	15 (94 %)	16

1-on-1 educational sessions	2 (13 %)	1 (6 %)	0	0	0	13 (81 %)	16
Physician	4 (25 %)	4 (25 %)	2 (13 %)	0	0	6 (38 %)	16
Massage treatment	2 (13 %)	0	1 (6 %)	0	0	13 (81 %)	16
Chiropractic treatment	0	1 (6 %)	1 (6 %)	0	0	14 (88 %)	16
Educated self	1 (6 %)	1 (6 %)	0	0	0	14 (88 %)	16
Alternative medication	0	0	2 (13 %)	0	0	14 (88 %)	16
Medication	7 (44 %)	2 (13 %)	2 (13 %)	0	0	5 (31 %)	16
Other	7 (44 %)	2 (13 %)	1 (6 %)	0	0	6 (38 %)	16

Table 8. Frequency of Services Used by PEARS Non-participants

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A	Total
Injury healed on its own	1 (11 %)	0	0	0	2 (22 %)	6 (67 %)	9
Rest	3 (33 %)	2 (22 %)	0	0	0	4 (44 %)	9
Work tasks reviewed	0	0	0	0	0	9 (100%)	9
Equipment modified	0	0	0	0	0	9 (100%)	9
Hours/duties modified	1 (11 %)	1 (11 %)	0	0	0	7 (78 %)	9
Physician	5 (56 %)	0	0	0	0	4 (44 %)	9

Physiotherapist	2 (22 %)	0	0	0	0	7 (78 %)	9
Occupational therapist	0	0	0	0	0	9 (100%)	9
Massage treatment	0	0	0	0	0	9 (100%)	9
Chiropractic treatment	1 (11 %)	0	0	0	0	8 (89 %)	9
Education	0	2 (22 %)	0	0	0	7 (78 %)	9
Alternative medical treatment	0	0	0	0	0	9 (100%)	9
Medication	2 (22 %)	2 (22 %)	1 (11 %)	0	0	4 (44 %)	9
Other	1 (11 %)	3 (33 %)	0	0	0	5 (56 %)	9
Still injured	0	1 (11 %)	0	0	2 (22 %)	6 (67 %)	9

Table 9.

	Participants		Non-Participants	
	Yes	No	Yes	No
Q6- Are there any other services or treatments you would liked to have accessed but were not available to you?	6 (38%)	10 (63%)	1 (11%)	8 (89%)
Q7- Had you heard of PEARS before PEARS contacted you?	13 (81%)	3 (19%)	8 (89%)	1 (11%)

Table 10. PEARS Participants

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Q11- Was your workplace manager supportive about PEARS?	12 (80%)	2 (13%)	0	1 (7%)	0

Q12- Did you feel pressured to participate in the PEARS program?	0	1 (6%)	0	1 (6%)	14 (88%)
Q13- Did you feel free to express any concerns or questions you had?	14 (88%)	1 (6%)	0	1 (6%)	0
Q14- Would you recommend PEARS to other employees?	11 (69%)	3 (19%)	1 (6%)	1 (6%)	0

** There were only 15 responses for question 11 because one of the participants is a workplace manager so did not respond to question 11.

APENDIX E

Interview Transcriptions

Sally's Interview

Q: So how did you get involved with the PEARS program?

Sally: It was just started at the hospital and I think,...when I got injured I'd gone through Alison, who works in Rehab, and she...she just said that I might be...should be going to this, and then she gave me the splint and then she kinda followed up...

Q: Alright, so...do you want to tell me...a little bit about your injury, like how you got injured?

Sally: Well, I think it's just through repetitive...you know...mmm...lifting and...twisting and...you know. I...I hurt my wrist, so it was so that I couldn't bend it either way, it would just...I had to keep it totally still...And so I just put a...a restraint thing on it ...rehab had gotten one for me.

Q: You mean like a splint?

Sally: Yeah. So I still worked, I didn't really have time off. I think I might have had one day off.

Q: And you said that the splint helped?

Sally: Yep.

Q: And do you still wear it?

Sally: I wear it if it is bothering me. I don't wear it all the time because it is so...it's too...restrictive. I put it on if I, you know, if I feel I need it, that I'm getting uncomfy feel when I'm....bend my wrist and then I know it's gonna hurt so it will start hurting so then I will put that on for a day or two and then it goes away.

Q: Did you ever wear it for things you did at home?

Sally: Yeah, I had to wear it that time at home. I couldn't do anything...I couldn't....I had a weekend off that's why it never really ...then it kinda...helped me, you know like, just having the time off...

Q: Just resting?

Sally: Yeah. So I never did miss that much work. I think I only missed one day.

Q: If you had to sum up your experience in the program, what would you say?

Sally: Well I thought it was good. I thought that she (Alison) was quite attentive, she, you know, came down and you know, made sure things were looked at and she did quite well. She gave me a lot of…just told me where to go for my injury, what to do, how to,…you know. I thought she did quite well.
Basically she got a splint from the OT who also did an worksite assessment on got on the maintenance department to fix some of the machines.

Q: …So what is your impression of the program now?

Sally: Well I haven't really had much follow up since…my….incident so. But though, the other girl did get hurt in the laundry and then…the girl who kinda is the spokesperson for, in our hospital, she came down and…and made sure that the…certain things on the clean side were…were working right…and you know, she got on our maintenance department to get on…to work…to get these things working properly, there were quite a things weren't working right…

Q: …So overall how would you say your experience was with the PEARS program?

Sally: Pretty good, yep. There just was really no follow up…much follow up later. But I'm, but I don't,…like I…I mean I'm not hurting so…what I have is minor or whatever, but you know. So I don't really, I'm not in pain right now, so I guess if I was I would probably be going to her.

Q: So I understand, you got hurt, you saw Alison, she mentioned that it was a good program, so she gave you the splint.

Sally: Mhmmm

Q: So, did Alison kinda take a look around or?

Sally: Yeah, she looked around and she got on our…maintenance department to try and get some things fixed and…try and make it a little easier for us.

Q: And do you think that helps having a kind of an on site person with the program?

Sally: I think so yeah. Yeah, well I think it would for me if I got hurt again.

Q: You would know who to go see?

Sally: Yeah, it was helpful… I seemed to get over it quite quick. It wasn't something that really stayed with me so….I mean. I think the program was just starting then so she got me in the program right away so… I haven't really been all that involved in it really…

Q: Mhmmm…Do you think anything could have been done to prevent the injury?

Sally: Mmmm…well,…I do so much lifting and…and I'm always pulling the linen out of the washer and it gets tangled and its pretty…I don't know if you could…we tried to do…to do some things like with strings, like if anything had ties and that on it, I wouldn't put them in the big washers. So that helped a bit …

Q: It wouldn't get tangled…

Sally: It wouldn't get tangled up,…the pulling eh and just stuff like that…so. Yeah, I we've…fixed it a little bit. It…they still get tangled, but…

Q: Was there anything you would want changed or added to the services?...Or things that could be better?

Sally: I don't know maybe just a little bit more follow-up… you know…

Q: See how you are doing?

Sally: Yeah, cause you know some things still aren't working properly downstairs, but they are trying to get them done but….

Q: So follow-up to see if they are going do it,…fix the machines or whatever?

Sally: Yeah, Yeah. Cause sometime they get left…so

Q: If you had to make the perfect prevention program would you, is there anything you would like to see done or changed?

Sally: Nope, I don't know. I can't really…I'm not sure

Q: Ok. Kinda put you on the spot?

Sally: Yeah. Uhm….. I don't know,….trying to think of things to make it better down there, but I…you know, we've worked there for so long, we've been trying to do that for years, so.

Q: Well some tasks, there's just unavoidable, like you have to load and unload the machines so you can't….

Sally: Yeah, these are things that we have to do everyday so…we have to do them.

Anna's Interview

Q: …Alright, and do you want to tell me a little bit about your injuries that you saw PEARS for?

Anna: We had, …we had been going through our accreditation and I guess the work load was a little bit bigger and I started feeling pain in my right wrist and uhm,…just the pain kept, you know, increasing and it would not be at home, but I would have it when I came to work and it would just gradually come on and as it progressed it was coming on sooner, you know, with less and less hours in the work before it would show up….I don't tolerate pain really very well, so for some people it may not have been that big, but to me it was… you know, bad enough I couldn't work…uh properly. I didn't lose any time from having this injury, I just …worked around it and used my left hand and just gave that hand a rest. And from there, I mean I had adjustments done to my workstation which, you know, helped right away.

Anna: Until this one day, I just, …couldn't stand the pain anymore, it was just…too hard. So I went to Emerg and I had it assessed and it was said to be bursitis so uh, or tendonitis I think it was called. Tendonitis. And um…from there, I just uh…just ended uh, being putting on PEARS and went through physio and acupuncture. I am uh still not using that wrist.

Q: Oh, is it still bothering you?

Anna: Well, it's not that it's bothering me, it's just that I…with this injury I ended up changing my mouse to my left hand and I have continued since then and it is working for me so I just haven't changed it back.

Q: Now you're ambidextrous.

Anna: Oh well, now that is exactly what people say when they come to my desk because they see the mouse on the left. It has worked actually.

Q: And how come you haven't switched it back to the right?

Anna: Well….I don't know if there is a little bit of a side of me saying…well I don't won't to bring it back.

Q: A little bit nervous?

Anna: Yeah. So I don't want to….you know, it is working, I'm, you know, my left hand is fine and I am feeling because we changed the station I don't expect

anything happening to my left hand. But um,...I don't know, I guess maybe I am a little bit worried that if I start using the right hand again, maybe something will come back. So, just haven't bothered. So I don't know if it is something should consider...

Q: So how did you get involved with PEARS? You said you went to emergency...

Anna: Yep, I went to emergency and filled out the uh...um...incident report and then from there they just handed me the envelope that goes with PEARS. Um...I didn't ask for it or anything,...I just assumed it just came automatically being an employee of Northern Health.

Q: It was part of the package?

Anna: It was part of the package yep.

Q: Ok, and then physio contacted you or did you go to physio?

Anna: Well, uh...yes they, I guess from the paperwork it went there. But working in the hospital, you know, I just ended up going and saying ok, I need to see you guys.

Q: Help!?

Anna: Help. It's...its just easy because you know its right there.

Q: And was there a PEARS representative on site at the time? Like was Danielle here or was she in Prince George?

Anna: She was in Prince George.

Q: Ok

Anna: But Alison was the representative for PEARS and she is the one who did my workstation assessment.

Q: And did you find that helpful having someone right here on site as a PEARS representative?

Anna: Well, I believe that when you have somebody on site, it's always beneficial because you have somebody physically there as opposed to, you know, long distance, or just talking on the phone or e-mail. I mean, when somebody can actually...see what's happening, yeah, I just think it's...it's better, or more beneficial for the uh the program.

Q: Ok, so those changes (workstation ergonomics) were made by someone through PEARS?

Anna: Well through physio, so I'm assuming they are with PEARS…

Q: What other services did you get through PEARS? So someone came and did a worksite assessment and changed your setup. Did you have anything else?

Anna: No

Q: Did you see physio for anything or did they just come and change your workstation?

Anna: No, I did see physio, I went down and had weekly visits and they did acupuncture and ultrasound at the beginning and dipped my hand in wax and all that stuff.

Q: Did you have any kind of splint or anything made for you?

Anna: Uh, yep, they did give me a splint to wear, but with my work you know having to type and use the mouse, the splint I would use mostly after hours.

Q: And did you have any kind of discharge or follow up after? Like once they came and saw your station and everything was…

Anna: Um…Well…they would just ask how your wrist was doing, but that would be in the hallway or whatever, but it, I didn't have, I don't recall, a follow up visit at my station or um, a follow up in that respect.

Q: And was that just Alison that you said would pass you in the hall?

Anna: Yeah, yep. Or Richard also would um, would ask.

Q: Do you think anything could have been done before to prevent your injury?

Anna: Oh yeah. Yes, yeah, because ah, by reorganizing my workstation and by um, having the wrist pad and…ah bringing down the mouse from the desk to the uh keyboard brought down. Um all these things I think were a factor that could have been avoided if I would have had my mouse in the proper location.

Q: Is there any changes or anything else you would like to add to the program to make it better? Is there anything else that could be done?

Anna: Well my own perspective, well no. Because my kind of injury was ….minimal, you know, I wasn't something that big that required further PEARS involvement… I mean if there is a way of maybe bringing PEARS in…in a

preventative form, then yes, uh then you would avoid these injuries from happening so I think sometimes workstation ergonomics sometimes is one of the biggest things for back problems, neck problems, and shoulders, wrists, or whatever. So I mean of course if you bring, you look at PEARS as a preventative um measure as you would for chronic disease prevention management then you would definitely…

Q: So like in your case, it would have been nice if someone would have come in before….

Anna: Well yeah, cause you don't really recognize it until you know, something happens. It would be good it PEARS was more preventative to help people before they get hurt.

Q: Is there anything else you would like to add?

Anna: They need to continue promoting the program and have an on site rep. People are enthusiastic at the start but that wears off and people need to be reminded about safety.

Bill's Interview

Q: …Well, do you want to tell me a little bit about your injury that…got you involved with PEARS?

Bill: …Actually what got me into PEARS was my knee injury where I uh…slipped on some water in the hall here. That was on property and got me into PEARS. So, I ended up uh…I guess I irritated it, I guess its osteoarthritis, I think in my knee.

Q: Mhmmm

Bill: Um….as the orthopedic surgeon said …this is your um knee, your uh knee caps are like disc brakes….and my brakes are shot.

Q: So after you slipped and hurt your knee, how long did it take PEARS to contact you, or how did you get initial contact with them?

Bill: Uhm…within, uh, with that one, I think because it was WCB, uhm probably within a couple of weeks. For my neck injury which I was off for longer, I was off for two months with that.

Q: Mhmmm

Bill: Because uh....it took, I guess a few strings got pulled on this end of it with the people that were running PEARS so I could get into physio. And then when I got into physio, that's when the healing really started.

Q: And how bout your knee? Did you have physio or see anybody for your knee or did you just go and get help from you doctor?

Bill: I've uh, no I was doing uh, some physio with it and nothing, just limbering it up and just strengthening it. They said uh, I should be for most of the physio is, I should be going upstairs and riding down. When I'm in the building here. What I found though is that I can only go up, right now, I can only go up say half a flight and then it starts to irritate me. Whereas I can walk down the whole length.

Q: And at the time was there a PEARS rep on site? Was there any...like how did they contact you?

Bill: Yeah, uhm I think, Alison

Q: Alison?

Bill: Uhm, Alison?

Q: Yep

Bill: Was the PEARS rep.

Q: Was the one that got you set up with everything?

Bill: Yep

Q: And did you find that helpful having someone on site?

Bill: Well yeah, cause then there is someone here you can talk to. Uh, uhm, uh, you've got communications, whereas after, uhm afterwards I think it was uh, uhm, I'm not sure who I was talking to, I forget the name, I think it was either... out of Smithers, or maybe it was Prince George.

Q: Someone called you from out of town?

Bill: Yeah

Q: But you noticed a difference from...?

Bill: Yeah, yeah... uhm I mean, uhm, well I don't have the numbers to get a hold of them or something that way down South. I think I did at one time but, but, uhm...but it was just like,...uh it to mean it just seemed like that was just a

secretarial thing that was just uhm, filling up the files or uhm, keeping the files straight and so basically they closed the files on me.

Q: And what do you think about PEARS and the prevention side? Like in your case, do you think they could have done anything to prevent your injuries before they happened?

Bill: Yeah, they could've kicked my teenager in the ass and got out and cleared the ice, but then that wouldn't do any good, they don't do anything with teenagers. You know, they'll do what they want.

Q: Because that's one thing, PEARS is not just once you get hurt, but they are trying to work on the prevention side so....

Bill: Well they're doing the best they could be. I mean there was a little bit of water on the floor so...I mean, we have that once in awhile uh, just uh, be cautious, I mean, it's for, in my case uhm...there was not a prevention thing. Uh I deal with uh W..., with uh WorkSafe, I'm on a committee. And a lot of things come up there, where uhm, they've got some uh, muscular skeletal injuries and they've moved somebody or done something wrong. And basically those ones, yes, uh, with the PEARS program they work on the prevention like the routines of what they are supposed to do. Which is uh...educate, the push for education for them too.

Q: Mhmmm.

Bill: Uh, you lift the patient uh properly, or you get an extra person, or you're supposed to have two people do this. Well then you have two people doing it. It is just educating the nurses that, usually it is the older nurses or something, or sometimes the younger nurses that were trained by the older nurses, well here you just try, you just do this, and it's wrong sort of thing.

Q: Mhmmm

Bill: Educate them. You get somebody to help. So you don't hurt yourself. A year off and it's costing them time uh off, plus it's costing the hospital uh time for uh lost time injuries...

Q: Would you have any recommendations or anything that you would like to see added to the program, or...?

Bill: Another person locally. We need, we, it's gone from Prince George, it's like you know....uh...it's too far

Q: Cause right now there is no local rep?

Bill: Nope. Alison's sort of stopped doing that, I guess it was uh I think she was, she took on too many different things I think.

Q: So other than having an onsite rep, that's about it?

Bill: I think so yep.

Stakeholders

Jane's Interview

Jane: Yeah, PEARS began I believe it was...well actually it went live in October of 2004 in Prince Rupert. PEARS is the acronym of "Prevention early active return to work safely" program, it's an OHSAH initiative, a Province wide initiative that OHSAH has has got now in all six of the Health Authorities. It traditionally was an early intervention program so it...it primarily focuses on secondary prevention. And historically, MSIP, or primary prevention, has really stood alone in health authorities. So primary prevention in one area and PEARS in the other. So now they are trying to bring the two and really trying to get that first 'P', PEARS, to mean primary prevention, not just secondary to when the incident has happened then we go in and try to prevent it for other people. It is based on 20 principles. These are revised or are just going through revisions. PEARS has primarily dealt with MSI injuries, but we are now starting to come into the realm of non-MSI. And it really focuses on early phase return to work...which, which I would want to add, staying at work, ... is big, cause when you return to work, you are already, you know it is already too late. And it also focuses on using internal resources, like in-house rehab, in-house worksite assessment, in-house resources to do symptom management and worksite assessment and it really focuses on having the worksite {telephone rings }Yeah so uhm, I can't remember really where I was at....

Q: Talking about PEARS. You had mentioned that they were branching out, not just doing MSIP, so what other injuries would be included.

Jane: So, mental health injuries, uhm...any kind of non-MSI which would include mental health, uh...cancers...yeah, chronic disease management....

Q: And how did PEARS get started in Prince Rupert? How did you get it up, the program up and running?

Jane: At that time it was, the leader was the early intervention advisor and together with OT, who was our site contact, they got that going, they went through a big marketing strategy to get the program going. Of course at that time too Laura was our PEARS program manager from OHSAH, she was very involved and she had been involved with implementation in other Health Authorities, so...Yep there was lots of work done in the Prince Rupert area. So

that's how it got going, with a big marketing strategy with pears, like a pear, the fruit...

Q: So can you describe your role within the PEARS program?

Jane: My role has been...I'm the PEARS leader...within the Prince Rupert, so right now the PEARS is at a site and it's Prince Rupert, so I'm the leader for that PEARS program in Prince Rupert. And the PEARS program is uh we've got uh...four sites uh within that area and ...yeah.

Q: And so what do you do as a leader?

Jane: Well it's been challenging, I...I did have uhm....really the PEARS program would require a site contact...because of course I'm off site so I have been the chair of the monthly meetings. I have really been the secretary of the monthly meetings...I've worked in the capacity of site contact with being off site so I try and bring together the steering committee members if there are issues to be dealt with, I'm that contact... and actually because of our resource gap of OT's and PT's...I actually also have a clinical role of uh...doing some uh...consulting with physiotherapy, symptom management and also some worksite assessments.

Q: Are you also the intake person?

Jane: Yes I am. So at intake, I input the contact into white. I follow up, I do try and get some resources to do a worksite assessment or a symptom management physiotherapy, but that has been quite difficult. So in the absence of those resources I then consult as much as I can.

Q: So then if someone in Prince Rupert gets a MSI injury, what happens?

Jane: Right now and then of course this is all secondary prevention...
You know,.. they, they come, ... so the form gets...the inplace signs are filled out. An incident investigation or an incident report form. That gets passed over to the supervisor, then that gets faxed to me here at Workplace Health and Safety, I uhm...then input that information into white,...contact the employee, determine what treatment or intervention they may require and then I proceed that way.

Q: Oh good. And so are you saying right now it is all secondary, there's no primary intervention?

Jane: No, last week...just last week because we had, and it still resulted from secondary prevention, so one employee got injured in a department and then we had four referrals of at risk employees for other...people in that department. It is primary prevention for these new employees, but secondary for that injured employee.

Q: And how do you feel the program is running now? Cause there has been lots of staff changes and ...

Jane: Uhm...I...I would have to say that it is probably lost a bit of momentum with the loss of the OT.

Q: She was your main contact?

Jane: Yeah. Yep so it did lose momentum at that time, I think now I would say that within the last couple of months it might have regained some momentum, of course there was a change in leader. There was from Pam to myself in June, that always has a bit of an impact. I think what's happening now, is we are getting a bit of primary prevention focus, more so. So we are trying to really involve the risk identification and hopefully that's where we can support those efforts. Also too, I'll give you a bit of history like because there was a lot of worksite assessments, I'm, I don't think the that the communication with the managers, the site managers, was as good as it probably could've been. So I see there could have been a little bit of lack of trust there, with the people doing the worksite assessments and then, you know, we would come and they would come and say you know you need a very expensive chair or whatever and there wasn't that communication or whatever. So PEARS could have, was sometimes perceived as "Oh my God if you call them in, they'll come out with some kind of huge equipment recommendation. And I've really tried hard to get the managers to actually, once the worksite assessment is done, actually get the managers themselves to determine what was in their priority. You know you don't want to decree the interviews and not pay the WCB costs or else probably get the equipment. But I let them decide. And I think it's been, I mean I was seeing it from my perspective, you might get a different perspective. But I think it has been a little bit better.

Q: Do you think PEARS is meeting the needs of the Prince Rupert hospital workers and employees?

Jane: I think it is meeting the needs. But I don't, actually I don't think it's probably used as much as we would like it to be. I think that ....you know as much as we've tried to market the program, probably it wasn't marketed as, like, we probably could've done some more marketing. And I think we could have done more marketing with the Rehab. Department. It was not as I think we just assumed that, you know, Alison was going to take it all on her shoulders and, and that was a big, you know that uh, probably, and she might have made that same assumption that she could do but really it needed the whole team. And then, yeah so, I think, I think it's meeting the needs for what they understand it to be but I think it could be (utilized more) because we're getting lots of injuries that are...I mean the people have already gone off. So now with the early intervention

component, I'm needing to contact them, and some of them haven't even gone through PEARS. See what I mean? After the fact.

Jane: Ah jeez that's a really great question. You know, I think that in our case, it's been, well we just don't know how it would have been otherwise. It's been good to have it in a small site, but we are really trying to focus now on bringing it to an HSDA, so to the Northwest, we are trying to expand it to being and HSDA program. Because as much as it's been good for Prince Rupert, you know our neighbours in Terrace and stuff I'm sure have felt a bit left out, you know? Cause there was some money. You know of course this was a Northwest funded initiative, so there has been some monies allocated and so it could have that perception. But because it was in a small area, it was contained enough and small enough that we will be able to evaluate it and probably know exactly where we need to focus our attention. And we know we need to focus on primary prevention. We know we need an MSIP advisor, and we know that intaking all of the intakes at corporate, like here in Prince George, is not the best model. It has to be back to the, well for now I think, ideally back to the site. But I'm not sure if that is a sustainable model. Like I don't know if every site could have their own intake person.

Jane: ... (The Steering Committee) functions have been a little hard to cover the functions because all of these people mostly are nursing, or support staff and as much as they are so interested they are not as knowledgeable probably as the Rehab staff would bring to this. We have a Rehab aide on there and of course everybody is, it's just over and above their job. There hasn't been, it's strictly a traditional committee that is volunteer, so the roles have been quite minimal, because of their lack of you know their lack of a time away from their job to help me out. And nobody on the committee right now has the capacity or the scope to do a worksite assessment or physiotherapy treatments. So because that's really what the PEARS program is... I mean their able to assist me with planning meetings, or helping me with inputting the agenda or finding the room or the proximal or whatever, but you know, in terms of anything else, it's been limited and not because, it's just because their, their not there. They don't have the clinical expertise. So, it's strictly a site, it's a bipartite committee, so we know unions are on board and all that. We've checked off all that kind of input, but it's not a ...it doesn't lend itself to the clinical expertise that we need. I'm the only Rehab person.

Q: And the steering committee that you know within other PEARS, are they more Rehab focused? Or do you know how the steering committees are running in the other places?

Jane: Yeah. They are. They have union representation that, for example, the HSDA representative would not necessary be, like ours is x-ray, I believe its x-ray. You know, ours would be they would be Rehab. And the nurse might be an Occ. Health nurse, you know. So then they would expect to go out and help out.

And of course the other PEARS programs have got a PEARS physiotherapist. They've got a PEARS Occupational Therapist...Yeah, so we have the committee, it's a site committee and it really is a by par type committee and we have union representation from BCGEU, BCNU, HSA and the Home Support one, I think it is USCW....We're lacking management representation we're supposed to have two so Barb, the Health Services Administrator, has acted on our, on our, on behalf of management but we are hopefully going to get another management rep. Our management rep, we would traditionally they've been non-contract, but in our case, we will likely have to go with a contract, so a union management rep. Which it's probably not ideal. We would like to have union and management strictly. But the group is okay with that as long as they can...you know we have a manager there. And our health services administrator, Barb, has agreed to be our overall contact. Lack of, yeah, lack of excluded managers actually in the Prince Rupert area right now. HR should also be there, but they are now recruiting for a new HR Advisor, so it's also...been open. We don't, we should have a physician too, a site physician, but we have operated throughout the whole, since October 2004, without a physician. And we have our area advisor, the Northwest Area Advisor, who is also on that committee. So those are our stakeholders, and we have really the minutes and the progress reports gets passed on to our Rehab. Department in Prince Rupert, but again, they uh, they haven't had they haven't been able to assist much. Because of their resources. Yeah.

Q: Yeah. Ok. So then how effective then do you think the steering committee is?

Jane: I don't, quite honestly I have the feeling right now, I feel very, I feel that I have to check in with the steering committee every month and everything I do. But on the action items I'm the only one pretty much...doing it. Yeah. So it's kind of a place to check in and make sure that I'm on track. So right now, how effective is it? Probably not as effective as we would want it to be because it isn't a...I would like it to be more of a working steering committee or an advisor committee. You know....probably where if I need some advice or I would go back and check with my colleagues or you know, compare myself to others.

Jane: Once we lost the site contact, we had an understanding from the health services administrator that we would have the inpatient physiotherapist be our PEARS staff member. And then he got injured, so then that didn't pan out so then we had to send some people to, we had to send a few people to private practice. And then the private practice physio. She had agreed to do one worksite assessment a month on work time. Like on Northern Health time that hasn't really panned out because of all these other resource gaps. So I've had to outsource to that private practice and, as you would imagine, with, and with a union driven....

Q: ...didn't go over all that well?

Jane: No....we've had a lot of talk about it and you know this is going to be the way of the future. We have, I've really made a point to tell them that we have to, what it is, is early intervention, and we have to be there. We have to provide the resources, and if it's going to be outsourcing, you know to private clinics, or private service providers, that's the way it has to be....Cause the model of having physio in house treats fast. It's not the trend. It's, we're coming out of that trend and what we're looking, what really is being examined provincially is....just like we have EAP, you know for mental health well, probably Northern Health should have a list of preferred service providers that we could outsource for our employees.

Q: Mhmmmm. And is that just because most facilities don't have the in-house staff to provide the services, or?

Jane: There's that. And then also, the public perception that if you're a staff member you actually get to bump the wait list for some of our outpatient patients. Yeah, for our outpatients. So, in this area we've had the luxury, or we've had the benefits of having a physiotherapist designated to treat staff, in a specific site. And we have been fortunate not to have the public perception... but it definitely is out there...in smaller communities. So I think we have to, we are looking at that Elisha, corporately here it's a big thing to, I call it symptom management, to have an agreement or you know, with an agreement or with a uh...a preferred vendor... to provide symptom management if it's physiotherapy, if it's massage therapy. And that they have the same outcome criteria that we will, you know that we want to return these people to work, or to maintain them at work. You know, to make sure that we don't have a low back pain taking 24 visits and they still not getting better. So it's really going to be focusing on the dependent, or the independent model as opposed to possibly encouraging dependency.

Jane: But for the Prince Rupert, we've got to come up with a sustainable model, that Northern Health, first of all, a sustainable model that, that provides "equal access to all Northern Health employees" So that we don't expect Prince Rupert employees to be more at risk than Terrace employees and that if you have the unfortunate event of having an injury, if you are unfortunate like that, that you have equal access to services.

Q: And by sustainable model, do you mean that mostly in terms of staff so that, or what do you mean?

Jane: Well, more staff is not necessarily going to fix it. It will help, but no, I mean a model that is more of a sustainable framework. Whereby we're not always treating and reacting to injuries, we're trying to be proactive and preventing them from occurring in the first place. So that actually the resources that you put reactively you probably don't need as much. You dump them more into primary prevention. That's a huge culture shift. You have to have staff write incident reports not actually at the incident stage, but at the risk stage. So that you

know, we can investigate and act on it now, even before they even experience signs or symptoms. So yeah, that's a huge culture shift. That's really trying to be less reactive and this is what's happening, it a very reactive process. We get injured and then we scramble around...trying to fix it. To find casual staff and workload staff to work for the shifts that cannot, you know...that the employee is off work.

Q: Yep. And I also want to mention too, just the difference between having an on site rep or not because then they can kind of see them passing in the hall or something or just quick checkup kind of informally. And that kind of made people feel good, where when you don't have people there, then it's a lot harder to like you said, get a hold of people.

Jane: Oh yeah, and it's both ways, where they can't get a hold of me, I can't get a hold of them. No, it has to be to an HSDA, at least to an HSDA and then it will be up to these resources to them provide these site resources I think. Like I mean, if we look at Interior Health, they started, I don't know how many years ago, probably not that much, I mean they had a few MSIP advisors, they're up to 35. I mean injury prevention, 90% of injuries in Northern Health are WCB costs are MSI's. And I mean our time loss, the time loss, and uhm, [inaudible] and we, and what we're doing now is not working. I don't know what we're doing. I have an idea. But obviously it's not working. And more education and training is not going to do it. People don't get injured because they didn't know what to do. They get injured because the resources weren't available or readily accessible. Like there is things that we have to put in place first to have people abide and follow a standard that we are going to set to them. And I'm, like I said, I do think that training and education is good, but what we need to train on is, you know what when you need to get that lift, you need to do this kind of thing, or when you put the sling in, this is how best to do it. Like not, should you be using the lift, or you know what I'm saying? It's more, this is the way it has to be. And it has to be very prescriptive. We're saying now a one person can't do a transfer or else a mechanical lift.

Q: So yeah, like taking some of that responsibility off the worker.

Jane: Yeah. They don't have to make that decision. Just how now, the time you would have taken to make that decision, this is made for you. Now spend your time going to get the lift. So that kind of switch. But uh, oh it's a big challenge.

Dave's Interview.

Q: Can you tell me about PEARS? And how the program works?

Dave: PEARS is just, PEARS is pretty tough to explain. It's a,...I would say it is an injury...prevention and early intervention return to work process. There are several different components in PEARS, it all starts with an incident I guess with an inspection incident, but then it links back to the workplace. Excuse me, let me correct that, how can I best explain this? Right now I'm reading through the material. Like I said it's an injury prevention, return to work process. PEARS was initially...I guess developed by, uh by par type committee, uh, which basically best practices uh, scientific literature and so on...

Q: Can you talk a bit more about your specific role within PEARS?

Dave: Yep, its, ...its actually changed in the past couple of months, uh, originally I was just working on, actually not in PEARS, I started off as an Ergonomist, working on ergonomic projects. I slowly kind of was being pulled into PEARS to assist Laura with her PEARS task and her duties... I started off just helping develop the track and reevaluation system within PEARS, on the PEARS White database. Uhm and indicators too, to measure PEARS successes. And then from there, I got involved in the marketing stuff, and became well equated with PEARS and the whole process. And then because Laura's leaving us from OHSAH, I just kinda naturally filled into her position as the liaison person with the steering committees.

Q: Do you want to talk a little bit about how the PEARS steering committee works?

Dave: For all PEARS programs, the committees are composed of oth union and management reps as well as exo-official members such as myself, the PEARS intervention team. Basically they govern the operations of PEARS, they oversee the operations, the role of the program, how the program expands, lots of different roles. Lots of different roles, they review current participants, investigate findings from each individual case and relay information back to the managers and the supervisors of that facility to prevent that injury from occurring again. Just like generally how, how any other Occupational Health and Safety type committee would function.

Q: How effective would you say their steering committee is?

Dave: I guess they're fairly effective definitely. Anywhere in health care right now the resources are just stretched, stretched so far they can only, they can only carry out so many tasks at one time right. And so with PEARS program right now in Prince Rupert because the resources are slim, plus the, the intakes, the amount of participants within that region, are not as high as the main, as other

areas within BC. Their role, I guess, has not been as busy I guess as the other areas, but yet, they have been very helpful and uh, provided a lot of feedback on, on what works within the PEARS program within Prince Rupert, what were the limitations. Right now the pilot is at, actually completing off, their final quarter is, I'm not sure if you're aware, that Northern Health is planning to expand their programs across the authority. So they've been very helpful in uh providing feedback in the busy case as well as what are the resource issues.

Q: Can you tell me a little bit about the limitations? Do you know?

Dave: Right now the biggest limitation is with the resources, with their resources. (They are) struggling with their intake and with their outpatient clinics. I guess the physiotherapist, has run into the ethical questions, like whether or not, or who do they treat first. Do they treat staff because it's a PEARS program or do they treat the other people, like the outside people, or just the patients period first. Depending on what their criteria is right? So there has been a huge ethical concern there. Uh...who should receive treatment and where should they be put on the wait list.

Q: Can you talk a little bit about the benefits or the disadvantages of having PEARS in a rural site, maybe compared to some of the bigger sites?

Dave: Oh definitely...uhm...rural site...versus...urban site. Uh once again I guess it goes back to resources issue too as well. And uhm...thinking back, well providing treatment first of all, uhm on site and accessibility for workers uhm to those resources as well as linking back to the workplace and conducting the workplace assessments and so on like that. In the rural areas, the travel to another site to provide a worksite assessment and whatnot is quite timely and uhm, uh with PEARS, with all PEARS there's lots of things you want, you want to ensure early intervention and that, and collaboration with other groups and there may be limitations in that and that is the distance things, uhm as opposed to urban where everything is just so centralized and its all accessible to the worker.

Q: Uhm, how do you feel, from OHSAH's standpoint, that PEARS is running in Prince Rupert? Do you feel it is meeting the needs of the workers there?

Dave: That we're still currently, essentially we're currently evaluating that right now. Uhm...we're conducting the PEARS, like every PEARS program, or every initial pilot program for PEARS, they receive a one year I guess you could say evaluation report from OHSAH. Uhm...like I said, the Prince Rupert site is just currently finishing up their final quarter. So we are currently working on that to see whether or not the costs benefits were reached from the PEARS program. Uhm...as for participations from annual reports that Lynn provided, uhm, participations rates seem quite high at the timelines at which, with the speediness I guess of how quickly they intervened and how quickly they saw each of the workers. Uhm, it seems to have, actually it seems pretty comparable to all the

other programs. Uhm...they generally, they generally meet with the workers in less than a week's time, and intervene in less than a week's time, which is great. Uhm...yeah, like I would have to be, I would have to tell you later. I guess from what we find from our uhm, information we've been tracking in the white systems.

Q: Alright. In terms of the prevention aspect, I know at the beginning you were telling me that people initially, its, its still an incident report and then they're followed up. Is there anything going on kind of about risk management? Like before people get hurt to try and get in there?

Dave: Oh definitely, like uhm, I'm not too sure whether or not its happening in Prince Rupert. As part of the MSIP group it's just like the integration with MSIP in PEARS. Some PEARS coordinators go in and they provide educational services and workshops or what not. (If) they see that there's like an increase in reporting from a specific department, instead of providing one-on-one education with each of those workers, they probably addressed the situation as a whole for that department. Maybe provide a workshop to that department. Provide the intervention measures with recommendations to the department manager to make changes to all workstations within that area. Uhm, yeah, its pretty good, there's a good link between primary and secondary prevention there.

Q: Do you think its important to try to have an on site PEARS representative at each of the sites?

Dave: I think it's really important, and, and I'm pretty sure Lynn would agree to as well. Like just to have a face there for, for the workers to be acquainted with or familiar with, even with, with there intervention team as well, to uh, to help direct them and case management as well as uhm, just priorities with there uhm, with priorities cases there are within PEARS and, and uh overseeing the whole operation. I think it is very important. Yeah, and it's the whole philosophy of PEARS to, everything is provided on site. And I think that's key.

It is very interesting that Dave mentions in that last sentence that "the whole philosophy of PEARS is to have everything on site" because Prince Rupert has really struggled with that and have not had an onsite representative for awhile and have had to contract out for services because of a lack of in house resources. It is good that PEARS wants to keep everything on site but just how feasible that is for the smaller communities is hard to say.

Q: Do you see the North having to come up with a little bit different model than...

Dave: Uhm yeah, that would vary definitely within each of the HSDA's. Depending on, I don't know, what the resources are and as well as I guess how disperse the facilities and the locations are with geographically within each of those HSDA's. Yeah, each model will probably be, oh just a bit of the process might be a bit different. But the way I see it too, the way that Jane had explained to me, there'll probably be a central site coordinator with, not a site coordinator, a PEARS coordinator within each of the HSDA's. They'll travel around and provide I guess guidance to each of the facilities, ergonomics, consultation and so on and whatnot, but there will also be like an onsite intervention team which will include either an OT or a PT or a psychiatrist if they expand, if they plan to adopt a mental health model to as well. It's going to vary, it's still up in the air right now. It's just we're, or they're just waiting to hear how much funding they actually secure before going ahead with the model.

April's Interview

Q: Do you understand just how the program works?

April: Uhm, well how the program is theoretically supposed to work, is that it is a bipartite process through OHSAH which is the Occupational Health and Safety body for health services...and so the funding would go through them from both management and the union. And they have to develop and over see the project. They developed the data system for the project, which is called the White database. Personally I have a problem with that, but...uhm hopefully we can work that part of it out.

Q: What is your concern with that? Is it with the white database?

April: Yes.

Q: What's the problem with it?

April: Well my, my chief concern was that I fear that the management side is going to be using that database as an attendance management system. Rather than for what that was intended. But, they have the access to the database is very one sided. At this point, its mostly David, they get to put the stuff in and they get to pull the stuff out. And I questioned it at the meeting that I attended down in Vancouver for PEARS, was with OHSAH. I went to the rep from my union and I questioned the process and I was told, and I guess I have to believe what they tell me, that the system is...oh what do you call it? Like not erased, but it is protected at the certain levels. So it is information that is removed and generalized before management can access it.

Q: Why? Is that to protect employees or?

April: Well yeah, yeah. Well yeah, it is supposed to be like freedom of information and personal privacy. It is supposed to cover that part of it. But, as I say, uh, when I look at some of the stats at the PEARS committee meetings, their pretty good, I mean it is numbers. When they showed us the database as an example, you know it wasn't a real file, but as an example file, there was a lot of information in there. And then I also sit on my Occupational Health and Safety committee meetings, and it is in my office, so when I went to one of those meetings, management came and they had, they had reports that was generated by the White Database. Which was to do with attendance. So that's where my fear came in. And I started wondering well what the heck are they doing with this system. So, for me, that's a concern. The white database in particular. The program itself, I, I have great faith in. I think it's a good program and I think it would work really well for both sides. That's if it is working properly, but I don't want to see one side taking advantage of information that's going into that, into that process. Not using it for something other than what its supposed to be.

Q: Can you describe what your role is in PEARS?

April: ...My role on the Steering Committee is to make sure that you know, their meeting the mandate of the bipartite process. That, and also in the interest of money, cause the money is helping to fund this as well.

Q: And how does the Steering Committee function right now in Prince Rupert?

April: Well we were functioning really well until we had, until we ran into this resource problem. What happened was the, the person who was kind of heading it up here, and she was the Occupational Therapist based out of the hospital, ...she would do all the intakes. So she was a union member as well. As well as an employee, you know, as well as a supervisor, so she was sort of covering all three roles herself as well. And, and then for some reason, uh, well she, she had some problems, you know, of her own and she retired. And there's no, there just seems to be a huge shortage of, of uhm, Occupational therapy, of Rehab people in this province right now.

Q: She was kind of a key person....

April: A very key person. Well key in many ways. And this is where, when I approached my union because I went to the meeting and all of a sudden management was sort of telling us what they were going to do, to replace this person, and they were going to contract somebody. And, you know, they were pretty much going along with it. So I went to my union and said, whoa, you know, we don't want to contract...

Q: You mean like private?

April: Yeah, because say, that this is the other key point. Before we had PEARS, we had, Northern Interior had a contract service called Aclaim. And so it was a private contract. A kind of management service. And so that made me very weary, made many people very weary. So I wanted my goal was to make sure we didn't end up with another Aclaim, only calling it PEARS. And to bring harmony into it as well. So after she left and after we had the resource shortage, I found that you know, we were having a hard time finding someone to fill this roll. So we did have to go, to go sort of quazy contract. This person is an employee, part time, and we are contracting part of her time, for the time employed to do this, but on her own time she's private. So, we're, we're getting kind of a strange little mix there. We had to be creative to make up for the lack. But, for awhile there we weren't having management show up a the meetings. We were having no management representation at the meetings, just union reps, sitting around the table....with the rest of them, the OHSAH and the other people on teleconference. So it, it became, and I think we probably had about three, two or three meetings like that, maybe not as many as three, maybe it was only two. But we were, we were quite upset by that, all of us were saying, well what's the point of this? And so the last meeting, there was two management reps at the table. Because we let it be known that, you know, from management, what's the point in doing this? Because we can't do anything. We can't make decisions, we can't vote, we can't nothing. So...now it seems to be getting back on track. We now have this person who, you know its not ideal, but it, it'll, it'll work, for now. And we have management back on board, being represented at the table.

Q: In, in what ways do you think the PEARS isn't meeting the needs of employees, is it just because there is a lack of resources or?

April: Lack of resources definitely.

Q: What do you think the benefits are and some disadvantages of having the PEARS program running in a smaller site like Prince Rupert?

April: The resources are really a disadvantage. Like in a larger community, you probably could've you know just talk to another Occupational Therapist. But here right now, this is at the hospital the rehab program, the rehab unit, is pretty much, well almost shut down, because of lack of resources. When I went to my doctor with my elbows, he didn't know this about PEARS or anything, but he said to me, well we'll do it with medication, the medication route first because you know there isn't really any rehabs available right now. There's a waiting list. And I knew that anyway. So that's a huge a drawback for us, a huge barrier. It is difficult to get around that barrier (recruiting new staff) because it is difficult to bring people period into the North. You know. And that's, that's probably one of the problems too, is because we're so North and so far away from anybody up here, like nurses, doctors.

Q: Do you think it is important to have an onsite PEARS representative for the initial intake process?

April: I think that would be very helpful. And unfortunately we won't get that, the onsite PEARS representation is the person that was laid up. That, that was at the hospital. The Health Unit is kind of being, is kind of being left out of the loop to some degree.

Lisa's Interview

Lisa: Okay, the PEARS program was a pilot project in our facilities for Prevention and Early Active Return to Work Safely. If any incident occurs at work where someone sustains an injury or a potential injury, they don't necessary have to of harmed themselves, but the potential was there, we complete a form and if its involving MSI's you tick that off and that's PEARS focus has been MSI's. And then they follow up, generally they make contact, I think with most, most people within the first 24 hours or 48. I know we've had a good response. And people are asked if they want to become involved in the PEARS program and some opt to and others don't. Others, like I said, they, they just report near misses and they don't really need follow up. Worksite assessments can be done through the PEARS program...if employees have a concern about their work area, they can approach someone in PEARS to have a look at that, to arrange for someone to have a look at it.

Q: Do you want to talk a little bit about your role within PEARS? Being on the steering committee?

Lisa: Steering committee? Oh, okay. Uhm, like I said, it was a pilot project so it was a learning experience for most of us, I would think. And we discussed our functionings as a group, set out rules, expectations and we did some promoting, we do it on an individual basis, but there was an advertised promotion that we had within the facility. I was away for that. So, my role. Okay, we have monthly meetings that we attend. I haven't always been able to attend them due to work but...and we have updates as to how many people had entered into the PEARS program, how much it's being utilized, what budget there is available, what's been accessed, what hasn't been.

Q: How do you think the steering committee is functioning?...Like do you think you guys are being effective?

Lisa: I think there's room for improvement. Like I said, I attended the last one, but I missed two or three before then. So I felt out of the loop for awhile. So reasonably effective.

Q: What kind of things do you think could be improved on?

Lisa: Maybe more of a proactive role. To make people more aware of us, that cause when I've had contact people in the hospital, I know the people in the lab the receptionist area there with the keyboard and things, somebody said they had an issue with that, but they hadn't brought it forward to anybody. And I don't think they realized at that time that I was a member of the PEARS committee. So, I mentioned to them that they could have a worksite assessment done. So I think maybe more awareness in that aspect.

Q: So they don't have to wait until they get hurt?

Lisa: Yeah.

Q: How do you think the PEARS program is running right now in Prince Rupert?

Lisa: I think it's running well. I've heard a number of people who injured themselves...they've been contacted, like I said, within a short interval. So they were very impressed with that aspect of it.

Q: Oh, good. So do you think its meeting the needs of the Prince Rupert Healthcare workers?

Lisa: Well there is a problem, right now, our physio department staffing is an issue, and there has not been physio on occasion for inpatient, so that means they haven't been available for outpatients for sure. And I know one or two of the PEARS clients have been seen by physio outside of the hospital, so private practices. And PEARS if funding that.

Q: Does that cause any issues?

Lisa: That issues needs to be resolved, in time, but it is an issue for now.

Q: What do you think the benefits, or disadvantages are of having PEARS run in a smaller place like Prince Rupert?

Lisa: I think the advantages is it's probably, if we were fully staffed in physio...there would probably be more. I don't know if it would be more readily available, but I would kind of get that impression. And just that people are closer knit in a smaller community, especially in the facility. We would know each other. And actually, that is one good reason for private practice too, 'cause although, its sometimes, familiarity is a good thing, sometimes people don't want that.

Q: Yeah, confidentiality.

Lisa: And so if being able to refer them to someone outside of the facility would be a good thing for some people.

Q: With all this staff changes and stuff, you talked a little bit about that, with the PEARS program, do you think its made a difference when there's been an onsite PEARS representative, to when there's not?

Lisa: Oh yeah. Definitely. I think that was one of the issues, because Alison was onsite before and she's resigned now. And she was great. And uh, could do the

worksite assessments. And also, actually one of the problems that we have, now that I'm thinking, we haven't had management participation. At the last meeting we did, but for a number meetings prior to that, we didn't. And that was again, due to uh the shuffling of positions within the facility, because John had attended on a regular basis for management before, as well as a human resources person and right now, our human resources uh position is vacant. And the other gentleman's job has been, restructured and he's no longer attending these meetings either. But they are looking for a permanent I think they're looking if the human resources position gets filled, to have that person attend.

Q: Well, what is their roles in the steering committee, the management?

Lisa: Well if there were decisions to be made, we couldn't really make decisions without some involvement or input from the management. I know financially, before, whatever contributions they might be looking at. Or if there was something like I said, they'll do ergonomic assessments...of an area, and it would depends on how much funding was available how, to what degree they could respond to suggestions made, I guess. Well whatever funding was available to them... Well like they were talking about chairs the other day. To fund chairs for one individual would be a limited cost, but if it was decided that these were the best chairs for all individuals, that would be a management decision, because that would be a greater expense.

Q: Yeah, and so if management wasn't there then...

Lisa: Yeah, we couldn't really make that decision.

Kate's Interview

Kate: So it's a program that is focused on both preventing and following up on musculoskeletal injuries. It's our prevention program, and it incorporates other things from creating a safe environment in terms of towards specific equipment that we're using to care for patients, lifts, aides, right through to identifying what necessary education staff might need to conducting and managing work safely and if they do get injured, then certainly they enroll them into the PEARS program for follow-up and eventually we get them back to work safely and hopefully, I mean the roles of the program is intended to try and get them back to work sooner than we would have normally seen, as is the practice today.

Q: Now when you say prevention, what is the program doing to try and prevent injuries?

Kate: The program's actually looking at, uh, its it's a young program. And right now we really only have the one coordinator, who is Jane, doing that work, and we're very hopeful that Northern Health will be able to help us invest in hiring some additional people who would act as Case Managers for each of the Health

Care facility in order to provide a little bit closer to home service for those people that are involved in the PEARS program. Or certainly identifying people who who may wish to be included...I know Jane is involved in working to try and standardize specific equipment that we purchase, to help people in their day to day work. So, she's looking at various lifts that are available, uh the sort of environment that we would be using it in. Is it acute care, is it long term care, and providing us with recommendations around what's there. And we are looking at the availability of education involving staff so that the committee, workplace health and safety, we have staff very involved in the PEARS program as well. So that it becomes sort of embedded in their culture.

Q: Can you to tell me a little bit about your role with the PEARS program in Prince Rupert?

Kate: Well as health care administrator when the PEARS program was first coming out, a number of us were uh asked if we would be interested in starting off with the pilot plan. I indicated that I would be very interested in that. So we certainly have started the pilot, we're a fairly small community in Prince Rupert to be getting it. It has taken us awhile to develop a sample size to be able to identify trends and, and outcomes of our interventions. But we're certainly getting closer now because we've been doing for close to a year now.

Q: And how do you feel about how the program is running right now in Prince Rupert?

Kate: I think that it is running really well. We have the steering committees and uh we take the time to uh review any workplace injuries that happen, look at whether there is anything that we could have imposed or any education that could have been provided that would have prevented it. So that we learn from each incident and, and try to improve the uh environment that we are working in. As I said, there was staff representation and I think there's a big commitment to being able to improve how people are working, and I believe our early results are showing that we are able to get them back to work sooner.

Q: Well good. Do you think that this program is meeting the needs of the healthcare workers there?

Kate: I think the program is meeting the needs of the health care workers, they're certainly aware of it. And I think that because we have our own staff participating in it and because there's very few referrals for the management staff. If we have any injuries people are have just sort of incorporated it into our accident investigation process and how we deal and how we follow up and evaluate how we're doing with that.

Q: Right. Do you want to talk a little bit about what you think the advantages or disadvantages to having PEARS run in a small community like Prince Rupert?

Kate: I think there was history for PEARS certainly before it began in Prince Rupert, and that is part of why, even though we live in a small community, we wanted to move forward and begin to introduce that into our health systems in here. If there hadn't been any precedence for PEARS earlier, I guess we would have, you know we would have had to wait a considerably longer time to be able to get some results and outcomes to see if we were making a difference. Some of the challenge for us is the different health care sectors and the needs that people have in each of those sectors are very different. From someone who is trying to support someone in their own home, who may not even have a lift to long term care, where we are looking at the possibility of, you know, for in the new facilities that are being built, making sure that we have ceiling lifts in place. Through to acute care, where you're probably more inclined to find people that are in a rush and less likely to take the time to act in a way that they know they should. When it comes to lifting or...or transferring patients.

Q: Has there been any challenges in terms of resources? For staffing or anything?

Kate: People leaving create a specific challenge, because our numbers are small, any shift in our numbers causes quite a gap but resource wise,...no, I think that we've done well so far, I think one of the areas that there is always a little bit of hesitation about is the idea of whether we're going to be able to support the recommendations that PEARS makes. You know for instance, if we just went out and decided that we were going to analyze everybody's office chair, and make recommendations for new office chairs, I don't think we could, reasonably, expect to, you know, purchase a whole volume of office chairs, if we'd done that. So if we, if we look at each incident individually, and we're looking at the sort of list for you saying we're looking at, what the room is like and how the furniture is placed and how the person actually moves about, from a body mechanics perspective, doing their job, we're actually making more of a difference I think.

Q: Do you want to talk a little bit about the other stakeholders who are involved in the PEARS program?

Kate: Well in particular I guess, its our rehab department is absolutely key.We have quite a challenge because of the shortage of physiotherapy and occupational therapists in the country as a whole. In being able to support the program and there certainly also for some of the support staff, there is an ethical concern with the PEARS program in that there's a perception that in putting our own staff forward for sort of rapid rehabilitation that its creating a two tier level of medicine. So that has certainly been an interesting state that we've had. I think to support the program fully we really do, either need to look at the feasibility of using the best use we can of whatever resources, either private or public, in supporting this. Or in fact, invest some additional resources, such as what Jane's doing with the Case Manager positions. Its very difficult, it's a significant

challenge in fact for the rehab staff in Prince Rupert to try and absorb the additional demands....and workflows, in terms of managing, or even looking at, if we wanted to do the entire program and we had farmed out to various, to various places, if we wanted to do our own intake and follow up and all of the other pieces that go with that. There is the time in the paperwork alone, would overwhelm our rehab department. And given the demands we have and the shortage of staff.

Q: Do you want to talk a little bit now about uh the steering committee in Prince Rupert and how that's been working out?

Kate: Actually the steering committee has been working out very well. Its uh, right we're actually looking for another management representative. And again, we have the same sort of small community challenge in that I have a very small limited number of managers and they're already committed to a lot of committees. And one of the managers that we had on the committee in the last while has left. So I've been looking for a replacement. And we have management at the table as well as having Jane chairing it at the present moment. We've been fortunate to have that because we've been a pilot site, but I think as time goes by we may be moving more to a regional PEARS committee, as opposed to a community specific site.

Q: Okay. Do you think its important, that PEARS has an onsite representative for the initial intake process?

Kate: I would say its absolutely critical to have an onsite champion for this process. For at least the first six months. It's the sort of thing that requires, I think, a visual representation. But, it requires somebody to have the time to dedicate to the reminding people about the program, to the following up on the program, to, you know, people begin to think PEARS program. Because otherwise when you delegate that sort of responsibility to any number of people, it sort of gets lost in all the other demands.

Q: Alright, so is there anything else you would like to add about the PEARS program or about your involvement in the program?

Kate: Probably not at this point, its still, its still in early days, I think it's really an exciting program. I think that it's critical in order to create a foundation for a safe worksite. But it does need to be resourced, and it does need to be marketed pretty consistently, so I think that would probably be my key concerns at this point in time.