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In Saskatchewan, one-third (33.8%) of workers are involved in shift work and this field of work continues to grow. Through in-depth interviews with Saskatchewan shift workers from a cross-section of employment sectors and perspectives and analysis of a wide body of statistical data and research literature on the effects of shift work, the Canadian Centre for Policy Alternatives asks readers to reflect on the degree of inhumanity that some employers are prepared to demand, some governments are prepared to allow, and some workers are prepared to overlook in the quest for increased productivity and 24-hour service.

What is Shift Work?

Shift work is defined as work that has a specific beginning and end and is also associated with unsocial hours, done on a rotating pattern. Typically, shift work is used more often in industries such as accommodation and food services, management and administrative services, transportation, trade, health, communications and primary industries.²

Who are the Shift workers?

If younger workers are ones under the age of 45, then a higher percentage of younger than older workers do shift work. In Saskatchewan, four-fifths of evening shift workers and over three-quarters of irregular shift workers are under 45 years.³ In regards to education levels, Saskatchewan workers tend to have lower average levels of schooling compared to Canada as a whole.⁴ Except for on call shift workers, the Canadian pattern, for shift workers to have lower average levels of schooling than day workers, also holds for Saskatchewan.⁵

Average incomes of Saskatchewan workers are lower than for the Prairies or Canada as a whole. Generally, day workers have higher incomes than shift workers, on average.

Shift Workers and Union Membership

In Saskatchewan one-third (33.8%) of shift workers are union members however, shift workers earn less than day workers. For example, unionized men doing day work earn \$46,500 while unionized men doing shift work earn about \$37,100. The advantages of unionization are significant for shift workers. For example, unionized workers earn higher wages and salaries, on average, than non-unionized workers. As well, unionized men in shift work earn \$37,100 on average while their non-unionized counterparts earn \$21,500.

Women Earn Significantly Less Than Men

Women make up the majority of shift workers in Saskatchewan however, this does not translate into equal incomes for men and women in shift work. Occupations that use shift work more heavily are occupations where women are well represented such as health and retail work. On average, unionized men in shift work earn \$37,100 while unionized women doing shift work earn \$25,800 on average. As well, unionized women in day work earn \$33,600 on average while non-unionized women doing shift work earn over \$23,000 less at about \$10,200.

Shift Workers and Sleep

Lack of sleep is a common complaint of shift workers and an important reason for leaving shift work.¹¹ There are four stages of sleep and it is clear

that sleep without stages three and four is poor quality sleep. ¹² Therefore, it is crucial that workers achieve these sleep stages if they are to function normally and avoid sleep problems. This can be difficult for shift workers because all types of circumstances can arise that disrupt their sleep. Thus, they can reach stages one and two but are unable to reach stages three and four. Some statistics about shift workers and sleep:

- 30 percent of Canadian shift workers compared to 23 percent of day workers reported having trouble going to or staying asleep.¹³
- 40 percent of night shift workers report sleep problems whereas 23 percent of day workers reported having sleep problems.¹⁴

Sleep problems appear to be cumulative. A lack of sleep over the course of a couple days may be manageable, while continued days of reduced sleep can lead to fatigue. In Saskatchewan, day workers got an average of 6 hours, while shift workers got 5.7, falling under the 6 hour mark would mean that on average shift workers are not achieving full sleep cycles. It seems likely that the bottom 25 percent of shift workers, especially on nights and rotational shifts, are accumulating sizeable sleep deficits that lead to fatigue that can become chronic.

"I think it all stems from sleep. Everything revolves around how much sleep you've got, which affects your family, your social life and your health....

Sleep is the most important." (Interview)

Shift Work and Health

Of particular interest, in relation to health, for shift workers are rhythms and patterns set for food intake and waste elimination, gastrointestinal functions, blood pressure, heart beat and cardiovascular functions, moods, emotions and psychosocial functions, metabolic processes and reproduction. Some methodological implications are that jobrelated diseases have several possible causes, the labour force involved in shift work is large, dynamic and has large flows in and out of shift

work, this means that cross sectional studies are at a disadvantage in finding and sorting out causes of health outcomes. ¹⁷ Therefore, to conceptualize the topic there will be a distinction between short-term ailments and long-term chronic diseases. Short-term ailments – such as fatigue, nutrition, medication disruption, irritability and stress- disappear or noticeably improve after the worker leaves shift work.

Long-term chronic diseases are ones that shift workers, especially night workers, initiate or contribute to and that do not disappear but grow worst once the worker leaves shift work. Examples of these long-term chronic diseases are gastrointestinal disease, cardiovascular disease, cancer, metabolism and diabetes and reproductive functions. The approach used here is to model the causal processes and attempt to arrive at a profile of those workers who have difficulty or simply cannot adapt to shift work. ¹⁸

Shift Work and Social Relations

Social relations are proven to be integral to human health and growth. There are a number of obvious and not so obvious factors that complicate the possible effects of shift work on workers social interactions such as times of shifts, shift variations, workers social role, etc. Therefore, certain shift work may affect certain social roles, cultural environment; sleep, health and social interaction: are not separate and can effect one another.

Shift Work and the Family

While shift work can disrupt parental obligations concerning children, and make parents feel guilty, it probably does not hamper the children's development. On the other hand, shift work can have a negative effect on marital relations. Workfamily conflicts arise from the schedules that interfere with more valuable family time. This can make family decision-making and building supportive relationships difficult, leading to family instability.

Shift Work and Social Interaction

Shift workers are in contradictory locations because their schedules are out of phase with most social rhythms. The potential for marginalization certainly presents itself to shift workers, and they do report such difficulties. The wonder is that the problems are not more serious and shift workers must find ingenious ways to adapt, use shift work to their advantage, given their stages in life, family obligations and so forth. However, the problems- or successes- that shift workers experience from their work are not entirely of their own making. For example, some are able to cope with shift work because of their locations in the class system of their community, province and country. The community, province, and country themselves may or may not, have put in place state structures that facilitate shift work on a human scale.21 If the resources which shift workers draw from larger social structures are missing, every day life can be difficult or even miserable.

"I switched off a shift for health reasons and family reasons.... It was really difficult, not the communication part, but ... getting my spouse to understand what I needed for rest time.... and that was something out of my control.... So I didn't realize ... when I chose the career that I would be sacrificing family. I would probably not choose that way if I had the chance to go back." (Interview)

Protecting Shift Workers and their Families

Too often emphasis is placed on what shift workers can do to protect themselves and their families as individuals in the process of adapting to shift work regimes.

It is important to emphasize that management and governments also bear responsibility to ensure the health and safety of shift workers. The challenge to workers is to find the resources to empower themselves to create the change necessary to create a healthy work environment.

Some examples the study indicated for workers includes:

- Push for changes to the OHS act to stretch the legal concept of risk so that it covers not only hazards such as dust, lighting, chemicals, etc. but all environmental work environment matters.
- Pressure Saskatchewan Labour to ensure that the "Work and Family Unit" fulfils its promise.
- Get informed! Read about shift work; the SFL has produced informative pamphlets and so have other unions. Go to shift work seminars and meetings. Compare notes. THINK about the nature of your work. Remember, you are the one doing shift work. Your experiences and your analysis are valuable.
- Speak up! Convince your unions and employers to recognize the connections between shift work and various negative health and social wellbeing outcomes.
- Lobby for Change to the Workers
 Compensation Board: The connections
 between shift work and ill health have
 recently been considered strong enough to
 call for screening workers before they are
 employed in shift work, and medically
 monitoring them at regular intervals with a
 view to treating them and/or having them
 leave shift work. The Saskatchewan
 Workers Compensation board
 recommended, "The (Saskatchewan
 Workers Compensation) Board research the
 effects of shift work when developing,
 interpreting and applying its policies and
 programs".²²

"[it can be frustrating] sitting with bargaining teams and bargaining and trying to make them understand that as a shift worker they should be trying to bargain language for us or bargain a better shift premium. But ... sometimes workers who don't work shift work go to them and ... [say] "why are you trying to get THEM more money, it should be a general increase for everybody? It's their choice to work shift work." (Interview)

Best Practices

A number of initiatives came as a result of the information that was found in the study of shift workers that can lead to best practices for workers and managers involved in shift work. For example, designing shifts and shift systems that workers can adapt more easily to such as forward rotating shift systems and compressed work weeks. Another example is paying shift work premiums in order to offset additional costs associated with shift work and that can act as an added incentive to retain shift workers. Another initiative that directly involves the workers themselves is to push management for worker input into scheduling. These initiatives can allow workers to be more involved in their work and create healthier environments for workers.

"One of the best things is when managers allow the workers to have input into scheduling, allow them the flexibility to readily trade shifts so that they can put family first when they need to." (Interviewee)

Conclusion

Shift work comes with a cost and this cost is born by workers. Too often emphasis is placed on what shift workers can do to protect themselves and their families as individuals in the process of adapting to shift work regimes. It is time that management and governments bear responsibility to ensure the health and safety of shift workers. It is also time that workers convince their unions and employers to recognize the connections between shift work and various negative health and social wellbeing outcomes and occupational health and safety issues.

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