

ARTHRITIS COMMUNITY RESEARCH& EVALUATION UNIT (ACREU)

The Arthritis & Immune Disorder Research Centre The Toronto Hospital

Employment and Arthritis in the Working Age Population

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prepared by

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HIGHLIGHTS

| Arthritis has a major impact on middle age and older workers , as the disability rate due to arthritis in the working age population is reported to be higher than for any other chronic condition . Projections have suggested that the number of people with arthritis in the older working age population is expected to almost double over the next 20 years . |
|---|
| 14% of the working age population (age 16-64) reported having arthritis, which was mainly long-term chronic arthritis. Slightly more women than men reported arthritis (16% versus 13%). Chronic and disabling arthritis generally increased with age, with 23% of those aged 55-64 having chronic and a further 5% having disabling arthritis. |
| 25% of people with arthritis were not in the labour force versus 14% of those without arthritis. The proportions of those not in the labour force increased with age for those with and without arthritis. The greatest difference in the proportions of those not in the labour force with and without arthritis was in the 55-64 age group. |
| Arthritis in itself did not increase the risk of not being in the labour force, whereas arthritis disability did. Pain, older age and low education increased the risk for both genders, whereas having children at home decreased the risk of being out of the labour force for men and increased the risk for women. |
| 57% of people with arthritis disability were not in the labour force. |
| People with arthritis disability who were not in the labour force tended to be women, older, had less education and less income than those employed, and had blue or white collar occupations. People with arthritis disability who were not in the labour force tended to have more severe arthritis disability with more pain than those employed, with little difference in the duration of arthritis. |
| When looking at the independent effects of each of the personal and disease characteristics on labour force status, there was a higher risk of being out of the labour force in those with arthritis disability associated with: being a woman , ages 45-54 and 55-64 (versus 15-44), low education (versus high), pain (versus no pain) and moderate and severe arthritis disability (versus mild). |
| Approximately one quarter of employed people with arthritis disability reported that they had changed their kind of work or their job, or believed themselves to be considered disadvantaged by an employer. 33% changed the amount of work they do and 42% reported being limited in their work because of their arthritis. Larger proportions of men and older workers tended to believe they were considered disadvantaged by their employers. Limitations in work due to arthritis were most frequently reported by men and by the youngest and oldest workers. |
| Most people with arthritis disability who were employed experienced problems with lifting, standing, crouching, kneeling and standing for long periods. |
| 6% of employed people with arthritis disability reported some type of employment discrimination, with being refused employment the most frequently reported type of discrimination. |

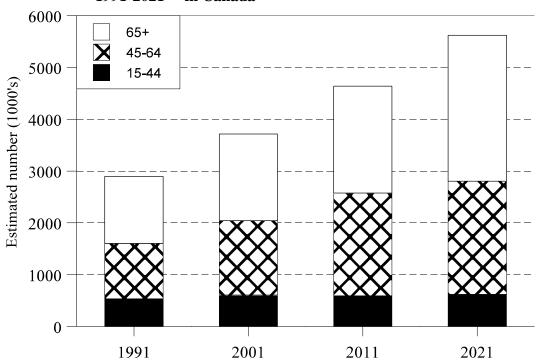
| One quarter of employed people with arthritis disability reported requiring some type of adaptation or accommodation at work. Up to one third of these people did not have the adaptations they required, particularly modified/reduced hours or days or job redesign. |
|---|
| The majority of people with arthritis disability who were not in the labour force believed themselves to be considered disadvantaged by employers and limited or completely prevented from work due to their arthritis. More men who were not in the labour force believed themselves to be considered disadvantaged. Slight gradients by age existed, with greater proportions reporting disadvantage and being limited/completely prevented in the oldest age groups. |
| 8% of people with arthritis disability who were not in the labour force reported some type of employment discrimination, with being refused employment the most frequently reported type of discrimination. |
| Half of people with arthritis disability who were not in the labour force reported requiring work adaptations or accommodations, with the most important being modified/reduced hours or days and job redesign. Accessible elevators, transportation and workstations appeared to be more important for those not in the labour force than those employed. |
| Almost one quarter of people with arthritis disability who were not in the labour force, identified the loss of current income as being a factor discouraging them from looking for work. |
| Workplace accommodation can affect the ability to maintain employment by people with arthritis disability and can increase productivity at work. As the population ages, it is important that workplaces find ways to adapt to ensure a healthy and productive work environment. |

BACKGROUND

Arthritis is one of the most prevalent chronic conditions in developed countries, ^{1,2,3,4} and affects almost 20% of adults in Canada. ^{1,2} Arthritis is the most frequently reported cause of physical disability in the population. ^{2,5,6,7} Arthritis-related disability has been estimated to be approximately 2.5% in the Canadian population aged 16 years and older, and it is associated with increasing age. ^{2,5,8}

Due to the association between arthritis and aging, arthritis has commonly been considered a disease of the elderly. Estimates of the prevalence in the working age population, however, have found that arthritis also has a major impact on this age group of workers. Arthritis has been found to be the second most prevalent chronic condition for men, and the first most prevalent for women in the working age population.³ The disability rate due to arthritis in the working age population has been reported to be higher than for any other chronic condition.^{3,9,10} Canadian data show that half of those of working age who have arthritis disability are not in the labour force because of their disability.^{5,11} It is estimated that the number of people with arthritis in Canada will increase by about 1 million per decade, and this increase will be split between the 45-64 and 65+ age groups. Projections have suggested that the number of people with arthritis in the older working age population is expected to almost double over the next 20 years.¹ (Exhibit 1) This will have major economic implications for the individual, and for society as a whole.

Exhibit 1: Future Projections in the Number of People with Arthritis*, 1991-2021** in Canada



*as long-term condition diagnosed by health professional/fram the NPHS, 1994

**Source: Badley EM, Wang PP. Arthritis and the aging population: projections of arthritis prevalence in Canada 1991-2031. Journal of Rheumatology 25(1)138-144.

As the impact of arthritis on labour force participation is high and continues to increase, it is essential that we understand some of the factors related to labour force participation in those with arthritis. Using three Canadian population-based health surveys, this report presents some of the personal and disease-related factors which are associated with labour force status in those with arthritis and arthritis disability. In addition, we will examine some of the disadvantages and barriers to employment for people with arthritis, as well as some the accommodations employers can make to facilitate work force participation for those with arthritis disability.

Objectives:

- 1. To describe the prevalence of arthritis and arthritis disability in the working age population
- 2. To examine the factors affecting labour force participation among those with arthritis and arthritis disability
- 3. To examine the impact of arthritis disability on work experience in those employed
- 4. To examine the impact of arthritis disability on work experience in people who were not in the labour force.

DATA SOURCES

Data from three large population health surveys were used for these analyses. The first was the Ontario Health Survey, which was done in 1990 (OHS90). In this survey, household interviews were carried out inquiring about the health of each of the household's members. Included were questions about chronic health problems and their impact including contacts with health professionals, use of medication, pain and discomfort and restrictions in activities. Approximately 45,000 people were included, and the results were weighted to be representative of the total population of Ontario. The OHS data were used in our analyses to present some overall numbers of arthritis in the population, by severity of arthritis, gender, age, and income/education level (Objectives 1 and 2).

The second major data set that we used was the Canadian Health and Activity Limitation Survey (HALS91), ¹³ conducted in 1991. This survey focussed on people with disabilities living in households who had been identified in the 1991 census by a screening question asking about long-term restriction of activity. The number of people with disabilities surveyed was approximately 25,942. This survey asked detailed questions regarding the types of disabilities people had, the difficulties they experienced as a result of their disability, aids and adaptations they used, and how their disability affected their employment experience. The HALS data was used in our analyses, to describe the employment experience of people specifically with arthritis disability (Objectives 1-4).

An earlier HALS conducted in 1986 (HALS86), ¹⁴ was used in this report to look at difficulties experienced at work as identified by people with arthritis disability. The results of these surveys were weighted to generate estimates representative of the Canadian population.

HOW WE DID THE ANALYSIS

All those reporting arthritis and rheumatism in the working age population (between the ages of 16 and 64) in the OHS90 were identified. We characterized the population as reporting no arthritis, or having arthritis reported as non-chronic, chronic or disabling arthritis. Non-chronic arthritis referred to those who reported having arthritis and rheumatism in one or more sections in the survey, but did not specify it as either a long-term chronic problem or a cause of disability. Selected personal characteristics of those with arthritis were examined (age, and sex) as well as labour force status. To ascertain labour force status, people were asked to indicate their main activity during the past 12 months from a list of six categories; working at a job, looking for work, going to school, keeping house, retired, and others. Those who were in school, looking for jobs and currently working were considered to be in the labour force. People were considered as not being in the labour force if they reported that they were retired, stayed at home, were not looking for a job or had never worked.

People with arthritis disability were identified in the HALS91, if they reported arthritis and rheumatism as a cause of disability in any of 12 activity-specific questions (related to mobility and agility), or they responded that they had general disability lasting, or expected to last, 6 months or more. Analyses were done for those of the working age population (ages 15-64). Personal characteristics (sex, marital status, age, education, income and occupation) as well as factors related to the nature of arthritis disability (severity, presence of pain/discomfort, and duration of arthritis), were examined in relationship to labour force status. Labour force status was divided into three main categories: employed, looking for work, or not in the labour force (i.e. not having actively sought employment in the past 4 weeks because of school or other reasons). The employed group was further sub-divided into employees earning wages/salaries/tips/commissions or those who were self employed. As the characteristics of those looking for work (unemployed) were very similar to those who were employed, and the numbers were small, they were not included in our main analyses.

A series of questions from the HALS91 were examined looking at the impact of arthritis disability on work experience, first for those employed, and then for those not in the labour force. These questions asked about limitations at work, perceived disadvantages by employers, problems with activities at work, employment discrimination, and work adaptation and accommodation required and available. Where appropriate, these questions were looked at by age and gender. Results from a question asking about factors discouraging people not in the labour force from looking for work were also examined. In this report we also looked at a series of questions in the HALS86 related to difficulties in doing a variety of activities at work due to arthritis. These activities included lifting, standing, crouching or kneeling, standing or sitting for long periods, using stairs, moving about, writing and typing, reading, speaking and using a telephone.

FINDINGS

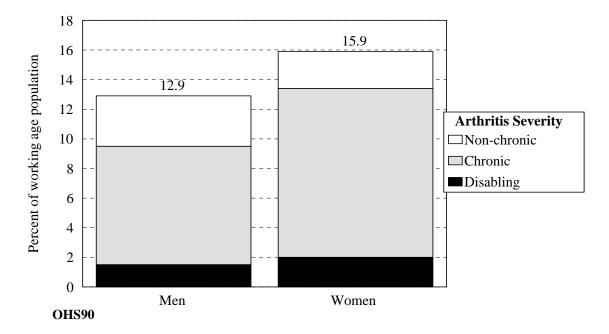
Part I: Arthritis in the Working Age Population

Exhibit 2: Estimated Number and Proportion of People with Arthritis in the Working Age Population (16-64 years) in Ontario (1990) by Severity of Arthritis

| Severity of Arthritis | Number | Percent of Working Age Population |
|-----------------------|---------|-----------------------------------|
| Non-chronic Arthritis | 192,000 | 3.0% |
| Chronic Arthritis | 629,000 | 9.7% |
| Disabling Arthritis | 115,000 | 1.8% |
| All Arthritis | 935,000 | 14.4% |

OHS90

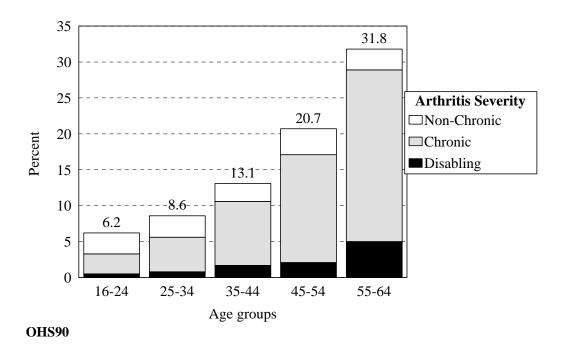
Exhibit 3: Percent of Men and Women of Working Age with Arthritis in Ontario



Overall, 14.4% of the working age population reported arthritis, with 13% of men and 16% of women reporting arthritis. 10% of people in this age group reported chronic arthritis, and just under 2% reported disabling arthritis. Slightly higher proportions of women reported chronic or disabling arthritis.

14% of the working age population (age 16-64) reported having arthritis, which was mainly long-term chronic arthritis. Slightly more women than men reported arthritis, specifically, chronic and disabling arthritis.

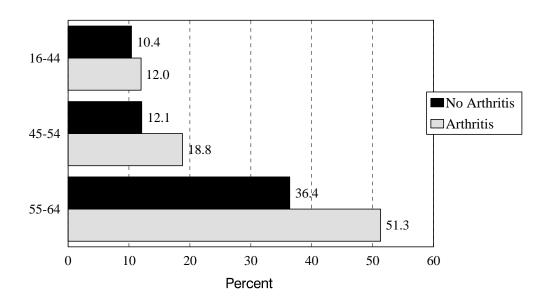
Exhibit 4: Percent of People in each Age Group who have Arthritis by Severity



The proportions of people with arthritis generally increased with age, with the most marked increases being in chronic arthritis, followed by disabling arthritis. The proportion of non-chronic arthritis remained approximately 3% at any age. The majority of people with chronic and disabling arthritis were 35 years of age and older, with 23% of people 55-64 years of age having chronic arthritis, and 5% having disabling arthritis.

Chronic and disabling arthritis generally increased with age, with 23% of people aged 55-64 having chronic and a further 5% having disabling arthritis.

Exhibit 5: Percent of People Not in the Labour Force in Each Age Group with and without Arthritis



Overall, 25% of people with arthritis were not in the labour force versus 14% of those without arthritis. Exhibit 5 shows that the proportion of people not in the labour force increased with age for both those with and without arthritis. Although the proportion of those not in the labour force at ages 16-44 was only slightly higher for those with arthritis, there was a marked difference between those with and without arthritis in the 55-64 age group.

25% of people with arthritis were not in the labour force versus 14% of those without arthritis. The proportions of people not in the labour force increased with age for those with and without arthritis. The greatest difference in the proportions of those not in the labour force with and without arthritis was in the 55-64 age group.

Exhibit 6: Characteristics that Increase the Chances of Men and Women with Arthritis being Out of the Labour Force

| | Men | Women | | |
|------------------|---|-----------------------|---|------------------------------|
| (| Characteristic | Risk (Odds Ratio)* | Characteristic | Risk (Odds Ratio)* |
| Arthritis | Disabling (versus no arthritis) | 2.68 | Disabling (versus no arthritis) | 1.92 |
| Pain | Pain that prevents activities (versus none, or pain that does not prevent activities) | 1.32 | Pain that prevents activities (versus none, or pain that does not prevent activities) | 1.23 |
| Age in years | 55-64 (versus 16-24) | 2.92 | 25-34 35-44 45-54 55-64 (versus 16-24) | 1.45 1.30 1.87 9.60 |
| Education | Low (versus not low) | 1.80 | Low (versus not low) | 1.98 |
| Family Status | Couple with dependent children Couple with independent children | 0.59 0.73 | Live alone Couple with dependent children (versus couple without | 0.49 1.79 |
| OHS90 | (versus couple without children) *holding all other predict | tors constant | children) | |

 $odds \ ratio > 1 = increased \ risk$

 $odds\ ratio < 1 = decreased\ risk$

Exhibit 6 provides the estimates of how much the risk (odds ratio) of not being in the labour force is increased for different personal characteristics for those with arthritis. The odds ratio gives an idea of the independent contribution of each of the characteristics to not being in the labour force. In addition to these characteristics shown, the location of residence (urban/rural), and whether people had other non-arthritis conditions were controlled for. There was an almost 7 times greater chance of men and 2 times greater chance of women being out of the labour force with arthritis disability (compared to no arthritis). There was no increased risk associated with non-disabling arthritis. Having pain that prevents activities (compared to no pain, or pain that does not prevent activities) also increased the chances of both men and women being out of the labour force. Men who were ages 55-64 had an almost 3 times greater chance of being out of the labour force (compared to ages 16-24), whereas the risks for women generally increased with age until ages 55-64, where there was an almost 10 times greater chance of being out of the labour force (compared to ages 16-24). Low education (compared to not low education) provided an approximately 2 times greater risk of being out of the labour force for both sexes. Finally, having children at home (compared to being a couple without children) decreased the risk of being out of the labour force for men, whereas for women it increased the risk by almost 2 times. Living alone (compared to being a couple without children) decreased the risk of being out of the labour force for women.

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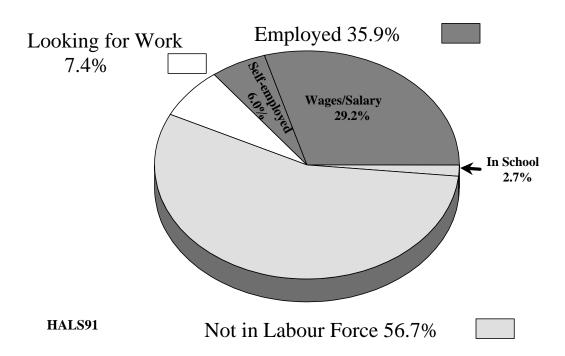
In summary, it seems that the risks of not being in the labour force for people with arthritis are a combination of arthritis-related personal characteristics. Arthritis in itself did not increase the risk of not being in the labour force, whereas arthritis disability did. Pain, older age and low education increased the risk for both genders, whereas having children at home decreased the risk of being out of the labour force for men and increased the risk for women.

Arthritis in itself did not increase the risk of not being in the labour force, whereas arthritis disability did. Pain, older age and low education increased the risk for both genders, whereas having children at home decreased the risk of being out of the labour force for men and increased the risk for women.

Part 2: Focus on People with Arthritis Disability in the Working Age Population

As having disability associated with arthritis increases the risk of not being in the labour force (see Exhibit 6), this next section focuses specifically on those with arthritis disability in the working age population. Overall in 1991, there were an estimated 327,000 people (1.8% of the working age population) who reported arthritis disability in Canada.

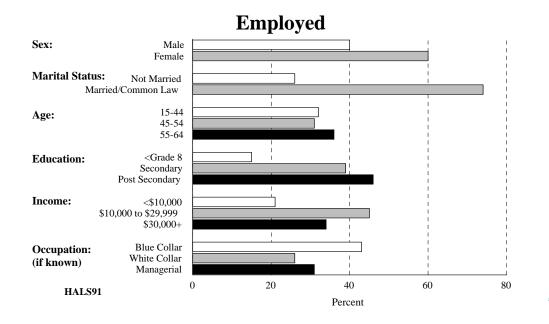
Exhibit 7 Labour Force Status in People with Arthritis Disability



Fifty seven percent of people with arthritis disability were not in the labour force. Of those who were employed, most earned wages/salary. A small group of people with arthritis disability were looking for work (7.4%). This proportion is comparable to that of those looking for work in the general population (8.5%).

57% of people with arthritis disability were not in the labour force.

Exhibit 8: Characteristics of People with Arthritis Disability Comparing those who were Employed to those who were Not in the Labour Force





40

Percent

60

80

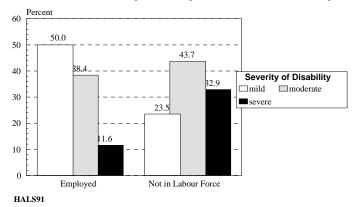
20

The majority of those with arthritis disability who were employed were female, married/common law, with secondary or more education, and had an income of at least \$10,000. Greater proportions of those in the not in the labour force group were female and not married, and they tended to be older, with less education and lower income. There were higher proportions of those in blue and white collar occupations in the not in the labour force group.

People with arthritis disability who were not in the labour force tended to be women, older, had less education and less income than those employed, and had blue or white collar occupations.

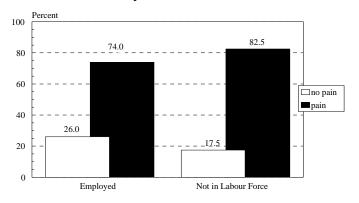
Exhibit 9: The Nature of Arthritis Disability and Labour Force Status

Labour Force Status by Severity of Arthritis Disability

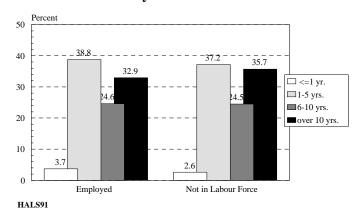


Those with arthritis disability who were not in the labour force tended to report greater severity of arthritis disability and more pain. There were few differences in the duration of arthritis between those who were employed and those who were not in the labour force.

Labour Force Status by Presence of Pain/Discomfort



Labour Force Status by Duration of Arthritis



People with arthritis disability who were not in the labour force tended to have more severe arthridisability with more pain than those employed, with little difference in the duration of arthritic

Exhibit 10: Characteristics that Increase the Chances of Someone with Arthritis Disability being Out of the Labour Force

| Characteristic | Predictor | Risk (Odds Ratio)* |
|----------------|---------------------------------------|--------------------|
| Gender | Female (versus male) | 2.24 |
| Age | 45-54 55-64 (versus 15-24) | 1.80 4.45 |
| Education | Low education (versus high education) | 1.79 |
| Pain | Presence of pain (versus no pain) | 1.34 |
| Severity | Moderate Severe (versus mild) | 2.46 5.38 |

*holding all other predictors constant odds ratio >1 = increased risk

This exhibit provides estimates of how much the risk of not being in the labour force is increased for different personal characteristics for those with arthritis disability. The odds ratio gives an idea of the 'independent' contribution of each of the characteristics to not being in the labour force. According to these results, there was over twice the risk of not being in the labour force for women with arthritis disability compared to men. There was almost a two times greater risk of not being in the labour force when age 45-54 and a 4.5 times greater risk when age 55-64 (both compared to age 15-24). There was almost a 2 times greater risk with low education (compared to not low education) of not being in the labour force. Finally there was a 1.3 greater risk with pain (versus no pain), a 2.5 greater risk with moderate disability, and a 5.4 times greater risk with severe disability (compared to mild disability) of not being in the labour force.

When looking at the independent effects of each of the personal and disease characteristics on labour force status, there was a higher risk of being out of the labour force in those with arthritis disability associated with: being a women, ages 45-54 or 55-64 (versus 15-44), low education (versus high), pain (versus no pain) and moderate and severe arthritis disability (versus mild.

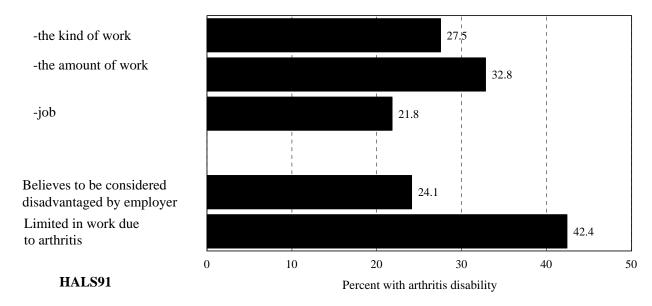
Part 3: Impact of Arthritis Disability on Work Experience

In this section, we look at problems with employment encountered by people with arthritis disability for those who are employed, followed by those not in the labour force.

A. Employed People with Arthritis Disability:

Exhibit 11: Changes to Work, Disadvantage and Limitation in those Employed

Because of arthritis, has changed:



Arthritis disability had a large impact on work experience, with just over 27% of people reporting that they have changed the kind of work they do, almost 33% having changed the amount of work they do, and approximately 22% having changed their job because of their condition. Almost 25% believed themselves to be considered disadvantaged by an employer and a large proportion were limited in work because of their arthritis (42%).

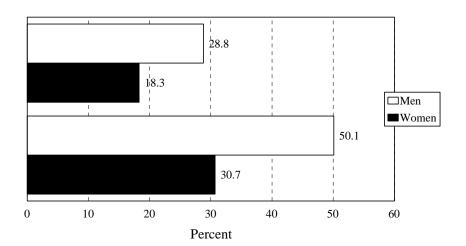
Approximately 25% of those employed reported that they had changed the kind of work or their job, or believed themselves to be considered disadvantaged by an employer. 33% changed the amount of work they do and 42% reported being limited in their work because of their arthritis.

Exhibit 12: Disadvantages and Limitations at Work Experienced by Employed People with Arthritis Disability by Gender and Age Group

By Gender:

Believes to be considered disadvantaged by employer

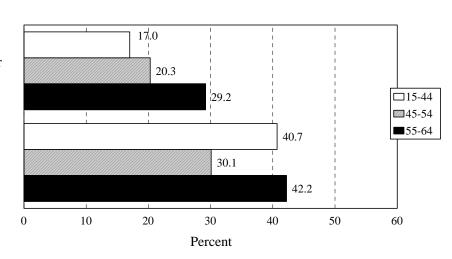
Limited in work due to arthritis



By Age:

Believes to be considered disadvantaged by employer

Limited in work due to arthritis

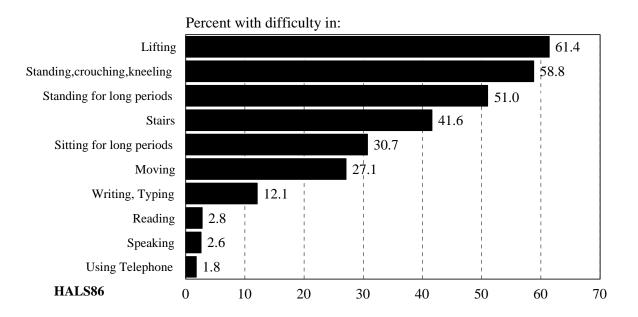


HALS91

More working men reported that they believed themselves to be considered disadvantaged by their employer, and that they were limited in work because of arthritis. More older workers (55-64) reported that they believed themselves considered disadvantaged by employer; however, similar proportions of older and younger workers (15-44) reported being limited in work.

Larger proportions of men and older workers tended to believe they were considered disadvantaged by their employers. Limitations in work due to arthritis was most frequently reported by men and by the youngest and oldest workers.

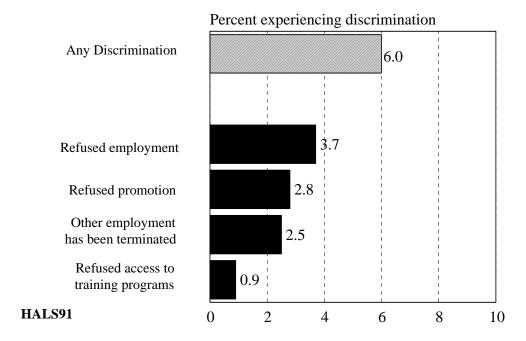
Exhibit 13: Problems with Activities at Work due to Arthritis Disability



Most people with arthritis disability who were employed experienced problems with lifting, standing, crouching, kneeling and standing for long periods. Large proportions of people experienced difficulties with stairs, sitting for long periods, moving and writing/typing.

Most people with arthritis disability who were employed experienced problems with lifting, standing, crouching, kneeling and standing for long periods.

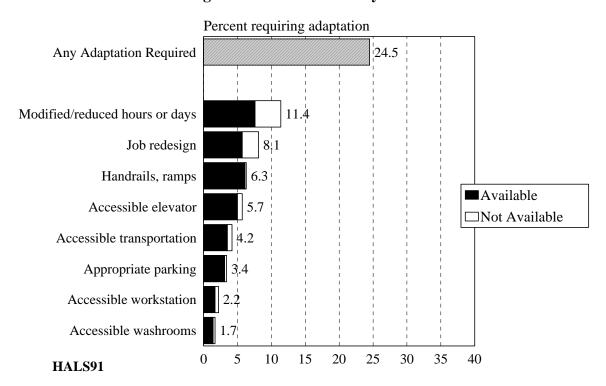
Exhibit 14: Experience of Employment Discrimination by Employed People with Arthritis Disability



Six percent of employed people with arthritis disability have experienced some type of employment discrimination, with being refused employment the most frequently reported type of discrimination. There was very little difference between overall discrimination experienced by men (7.4%) and women (5.3%).

6% of employed people with arthritis disability reported some type of employment discrimination, with being refused employment the most frequently reported type of discrimination.

Exhibit 15: Work Adaptation and Accommodation Required and Available for those Working with Arthritis Disability



One quarter of employed people with arthritis disability reported requiring some type of employer adaptation at work. Up to one third of these people reported requiring some type of adaptation at work that was not available. For example, 34% of those requiring modified/reduced hours/days and 30% of those requiring job redesign did not have them available at work. 22% of those requiring an accessible work station, and 19% of those requiring accessible washrooms, also did not have them available.

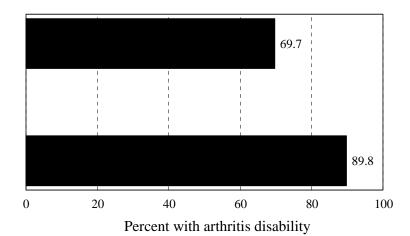
One quarter of employed people with arthritis disability reported requiring some type of adaptation or accommodation at work. Up to one third of these people did not have the adaptations they required, particularly modified/reduced hours or days or job redesign.

B. People with Arthritis Disability Not in the Labour Force

Exhibit 16: Disadvantage and Limitations at Work Reported by People with Arthritis Disability who were Not in the Labour Force

Believes to be considered disadvantaged by employer

Limited or completely prevented from work due to arthritis



The majority of people with arthritis disability who were not in the labour force believed themselves to be considered disadvantaged (70%), and reported that they were limited or completely prevented from work due to their arthritis (90%).

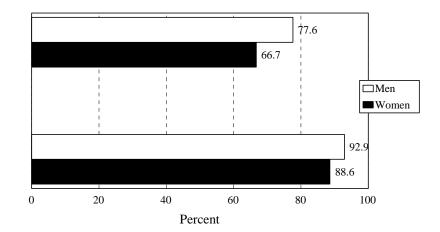
The majority of people with arthritis disability who were not in the labour force believed themselves to be considered disadvantaged by employers and limited or completely prevented from work due to their arthritis.

Exhibit 17: Disadvantages and Limitations at Work Reported by People with Arthritis Disability who were Not in the Labour Force by Gender and Age

By Gender:

Believes to be considered disadvantaged by employer

Limited or completely prevented from work due to arthritis

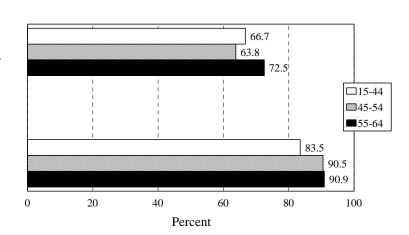


By Age:

Believes to be considered disadvantaged by employer

Limited or completely prevented from work due to arthritis

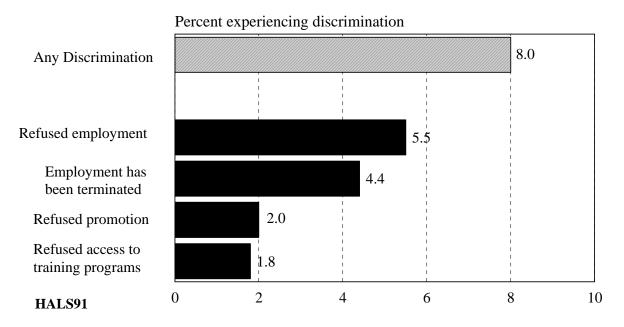
HALS91



More men who were not in the labour force believed themselves to be considered disadvantaged, whereas slightly more women reported themselves limited or completely prevented from work. Although there were not large gradients by age, slightly greater proportions of those ages 55-64 believed themselves to be considered disadvantaged. Those age 45 and over were more likely to report being limited or completely prevented from work.

More men who were not in the labour force believed themselves to be considered disadvantaged. Slight gradients by age existed, with greater proportions reporting disadvantage and being limited/completely prevented in the oldest age groups.

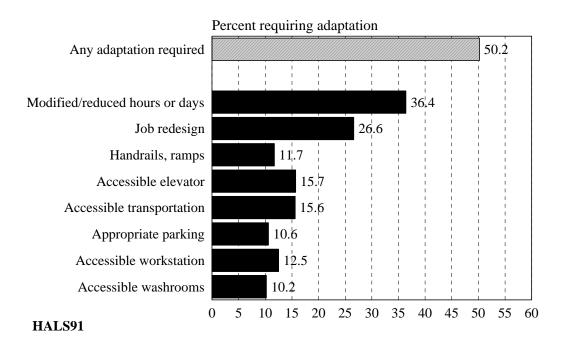
Exhibit 18: Experience of Employment Discrimination by People who are Not in the Labour Force with Arthritis Disability



8% of people with arthritis disability who were not in the labour force reported experiencing some type of employment discrimination. Almost 6% reported being refused employment.

8% percent of people with arthritis disability who were in the labour force reported some type of employment discrimination, with being refused employment the most frequently reported type of discrimination.

Exhibit 19: Work Adaptation and Accommodation Required by People with Arthritis Disability who were Not in the Labour Force

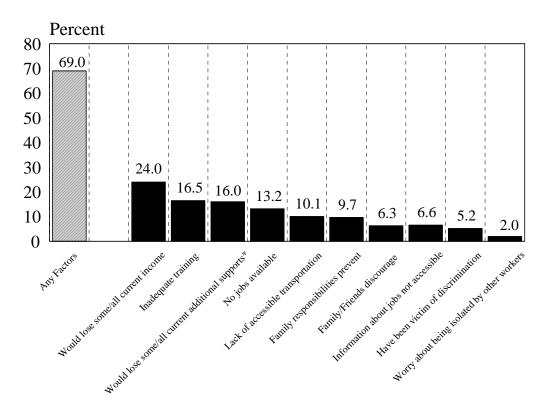


This exhibit looks at the types of work adaptations and accommodations people who were not in the labour force reported that they would need to work. For comparison purposes, we have listed the above adaptations in the same order as in Exhibit 15 which presents employer adaptations for those employed from the most to the least reported. As might be expected, the proportions of people with arthritis disability who reported that they required any of the above adaptations, were much higher for those not in the labour force compared to those employed. Overall, 50% of people with arthritis disability who were not in the labour force reported requiring any employer adaptations at work. As is evident in the figure, modified/reduced hours or days, and job redesign were the most required adaptation for those not in the labour force as well as for those employed. Accessible elevators, transportation and workstations appeared to be more important for those in the not in the labour force group than those employed

Half of people with arthritis disability who were not in the labour force reported requiring work adaptations or accommodations, with the most important being modified/reduced hours or days and job redesign. Accessible elevators, transportation and workstations appeared to be more important for those not in the labour force than those employed.

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Exhibit 20: Factors Discouraging People who were Not in the Labour Force from Looking for Work



*e.g. drug plan or housing

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In total, 69% of people with arthritis disability who were not in the labour force reported at least one of the factors shown in the exhibit discouraged them from looking for work. Almost one quarter of people with arthritis disability who were not in the labour force, identified the loss of current income as being a factor discouraging them from looking for work. Inadequate training, the loss of some or all current supports (e.g. drug plan/housing) and no jobs available were the next most frequently reported factors. 36% of people identified other barriers discouraging them from looking from work.

Footnote: The HALS survey was conducted in 1991. Since that time there have been some changes in Ontario to the legislation affecting financial assistance to those with disability. The Ontario Disability Support Program (ODSPA) (June 1, 1988), includes, among other things, increased funding for employment support programs and rapid reinstatement of benefits if a job attempt fails. It is not known how these changes might affect the factors presented in Exhibit 20.

Almost one quarter of people with arthritis disability who were not in the labour force identified the loss of current income as being a factor discouraging them from looking for work.

SUMMARY AND CONCLUSIONS

Factors associated with not being in the labour force:

The results of the analyses found that arthritis affected 14% of the working age population and was associated with work disability. The proportions of people with arthritis and disabling arthritis increased with age, with over 30% of older workers (ages 55-64) having arthritis, and over 5% of this age group having disability associated with arthritis. In those with arthritis disability, 57% were not in the labour force. There were greater risks of being out of the labour force associated with being a woman, ages 45-64, with low education, pain, or moderate or severe disability. These characteristics have been found in other studies related to work disability and labour force participation. A factor that was also identified by several studies as being related to work disability, was physical demands of the job. A factor that was also identified by several studies as being related to work disability, was physical demands of the job. A factor that was also identified by several studies as being related to work disability, was physical demands of the job. A factor that was also identified by several studies as being related to work disability, was physical demands of the job. A factor that was also identified by several studies as being related to work disability, was physical demands of the job. A factor that was also identified by several studies as being related to work disability, was physical demands of the job. A factor that was also identified by several studies as being related to work disability, was physical demands of the job. A factor that was also identified by several studies as being related to work disability.

Workplace problems in those employed:

It is evident from this analysis that even if people with arthritis disability were employed, they still experienced problems. For example, almost one quarter of those with arthritis disability who were employed believed themselves to be considered disadvantaged by an employer, and 42% were limited in work because of their arthritis. Six percent of those employed also reported some type of employment discrimination. Our analysis found that many people with arthritis disability, both those not in the labour force and employed, required modified/reduced hours or days, job redesign and accessible transportation, and a variety of physical environmental modifications. Up to one third of those employed and requiring some type of adaptation at their place of work reported that they were not available. These findings may indicate that although people may be working, they may be dealing with high degrees of fatigue and stress and perhaps lower productivity as a result of unfriendly work environments.

Workplace accommodation:

The effectiveness of workplace accommodation in decreasing work disability as well as employment loss, is well-supported in the literature. ^{16,17,18,19,20} Yelin et. al. ¹⁷ found that altering the characteristics of the job for people with rheumatoid arthritis to make them more conducive to the maintenance of employment increased by 97% the probability of patients continuing to work. Daly found that up to one third of workers who had become impaired were accommodated by their employers following the onset of their conditions. ²¹ The most common employer adaptations were alteration in job duties, assistance with the job, a change in schedule or a shorter work day and more breaks. Many studies have specifically identified job autonomy, characterized by the ability to exercise control over the pace of job activities, as being more important than pure medical factors as a predictor of continued work. ^{16,19,20,22} Self employment, where one has high job autonomy, also enables people to continue work. ¹⁹

Factors discouraging people from looking for work:

Almost one quarter of people with arthritis disability who were not in the labour force, identified the loss of current income as being a factor discouraging them from looking for work. This was a much greater proportion than those reporting lack of adequate training (17%) or no jobs available (13%). Of those with arthritis disability who were not in the labour force, 25% received disability pension from CPP, 21% received social assistance or welfare and 6% received payments from an employer insurance-disability plan. Of those not in the labour force who reported receiving any income from pensions/social assistance, 22% received payments from at least 2 sources. 16% of people also stated that the loss of some or all current additional supports (e.g. drug plan/housing) discouraged them from looking for work. As was mentioned previously, there have been some positive recent changes to the legislation related to financial assistance and employment for those with disability, which may affect these figures.

Potential costs of leaving work early:

In this analysis, it was found that there was a 4 ½ times greater risk of being out of the force for those with arthritis disability between the ages 54 and 65. As these are usually the last years of employment prior to retirement, they can be the peak earning years for many people. Having to leave work early would adversely affect the standard of living of older individuals of working age, as it will affect their retirement pensions. Medical benefits associated with the workplace would also cease, and evolving health problems of older working aged individuals could result in greater costs to the healthcare system.

Conclusion:

This report has summarized the employment status and factors related to employment of those with arthritis disability using several Canadian population surveys. It is expected that the number of people with arthritis in the older working age population is expected to increase over the next 20 years, which has major implications for the workplace in general. Both the literature and the results of these analyses have shown that there are many accommodations that can be made in the workplace, that could facilitate continued employment and increased productivity at work for those with arthritis disability. Many of these accommodations could be made without great financial expense. A flexible work environment which includes job autonomy, and other workplace modifications may also benefit workers with other disabling conditions, and may prevent workplace injuries and resulting absenteeism. As the population ages, it is important that workplaces find ways to adapt to ensure a healthy and productive work environment.

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