

*Résumé*

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**Répercussions de la crise économique mondiale sur la santé des travailleurs de l'automobile sans emploi**

**Wally Joseph Bartfay, Emma Bartfay, Terry Wu**

Une étude phénoménologique a été réalisée dans le but d'examiner les effets de la récession économique mondiale de 2008-2009 sur la santé des cols bleus sans emploi de l'industrie automobile de la province canadienne de l'Ontario, entre septembre et novembre 2009. Un total de 22 hommes et 12 femmes ont participé à l'étude. Les participants ont répondu à un questionnaire visant à recueillir des données quantitatives de nature démographique et financière. La part qualitative de l'étude consiste en une analyse phénoménologique de séances de discussions de groupe semi-structurées ayant duré entre 2 et 2,5 heures. Le nombre d'années d'expérience des travailleurs se situait entre 2 et 31,7 ans, pour une moyenne de 15,8 ans. Les participants ont dit souffrir d'un degré élevé de stress, d'anxiété et de dépression, ressentir des douleurs et des inconforts physiques accrus, avoir observé une transformation de leur poids et de leurs fonctions sexuelles, et éprouver des difficultés financières, y compris une incapacité de payer pour des médicaments prescrits. Les auteurs concluent de leur étude que les pertes d'emplois provoquées par la récession mondiale ont eu des effets négatifs sur la santé des travailleurs de l'automobile en Ontario.

Mots-clés : perte d'emploi, santé, travailleurs de l'automobile, récession mondiale

# **Impact of the Global Economic Crisis on the Health of Unemployed Autoworkers**

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A phenomenological investigation was undertaken to examine the effects of the 2008–09 global economic recession on the health of unemployed blue-collar autoworkers in the Canadian province of Ontario between September and November 2009. A total of 22 men and 12 women took part. Participants completed a quantitative demographic and financial questionnaire. The qualitative aspect of the study consisted of a phenomenological component comprising semi-structured focus group sessions lasting 2 to 2.5 hours. The number of years employed ranged from 2 to 31.7 with a mean of  $15 \pm 8$ . Participants reported high levels of stress, anxiety, and depression; increased physical pain and discomfort; changes in weight and sexual function; and financial hardships, including inability to purchase prescribed medications. The authors conclude that unemployment associated with the global recession has negative health effects on autoworkers in Ontario.

Keywords: unemployment, health, autoworkers, global recession

Unemployment is regarded as one of the greatest single stressors that an individual or family can face (Bezrucka, 2009; D'Arcy & Siddique, 1985; Jin, Shah, & Svoboda, 1995; Stuckler, Basu, Suhrcke, Coutts, & McKee, 2011). During the 2008–09 global economic crisis, the General Motors (GM) truck plant in Oshawa, Ontario, Canada, closed after 44 years of production, resulting in 2,600 jobs lost. Similarly, in June 2008 the Forment plant in St. Thomas and Magna in Aurora, which make frames for GM trucks, announced that they were cutting their workforce by 800 employees (CBC News, 2008). The Durham Region of Ontario has lost over 6,700 auto-manufacturing jobs during the past few years due to plant restructuring, downsizing, and/or closures by GM and associated auto-parts plants (<http://www.cawlocal.ca/222/>).

## **Description of Problem**

The worst global economic recession since the Great Depression (1929–39) occurred in the period 2008–09 and affected both developing countries (e.g., Brazil, India, Mexico, Thailand) and developed countries (e.g., Canada, France, Germany, the United Kingdom, the United States). Strully (2009) used a panel study to examine the impact of employment

on health in the United States. The study found that losing one's job was associated with a 54% chance of reporting fair or poor health and, for an individual with no pre-existing health conditions, the chances of reporting a new state of ill health increased by 83%.

Stuckler and colleagues (2011) examined negative public health effects associated with the recent global recession and government expenditures for 26 countries in the European Union. They found that every 1% increase in unemployment in the European Union was associated with a 0.79% rise in the rates of suicide and homicide. Similarly, unemployment attributed to the global recession in Greece (Giotakos, Karabelas, & Kafkas, 2011), Hungary (Duleba, Gonda, Rihmer, & Dome, 2012), Iceland (Hauksdottir, McClure, Jonsson, Olafsson, & Valdimarsdottir, in press), and Italy (de Belvis et al., 2012) are associated with increased rates of stress, suicide, depression, and psychiatric disorders. There is a dearth of research examining the impact of the global economic crisis on the health and well-being of unemployed Canadian workers. Furthermore, to our knowledge no previous investigations have examined the effects of the recent global recession on workers in the highly vulnerable automotive manufacturing sector in Canada. This study was intended to fill the gap in the literature by examining the health effects experienced by autoworkers in the Durham Region of Ontario, an automotive manufacturing region. The study sought to answer three primary research questions: 1. *How has unemployment affected the health and well-being of blue-collar autoworkers?* 2. *What is the lived experience of an unemployed blue-collar autoworker?* 3. *What are the current health-service needs of unemployed blue-collar autoworkers?*

### **Purpose**

Public health nurses and allied health professionals need a better understanding of perceived health-care needs and required services during economic downturns in order to effectively plan and implement primary health care services in their communities. It has been found that unemployment and poverty have negative effects on the health and well-being of individuals, families, and entire communities (e.g., Bezrucka, 2009; Brenner, 1987; D'Arcy & Siddique, 1985; Morris & Cook, 1991). In their quest for knowledge, nursing and allied health disciplines have historically relied heavily on a positivist as opposed to a humanistic approach to scientific inquiry (Cruickshank, 2012; Rose, Beeby, & Parker, 1995). The deductive positivist approach assumes that nature is basically ordered, regular, and largely predictable and that an objective reality exists independent of human observations. By contrast, humanistic approaches involve inductive processes that value the subjective and holistic compo-

nents of the quest for knowledge. Phenomenological methods are congruent with nursing ideals, which value humanistic knowledge and considers that the true meaning of phenomena can be explored and understood only through the described experiences of those affected (Beck, 1994; Jasper, 1994; Kleiman, 2004; van Manen, 1990). To our knowledge, this is the first qualitative study to examine the lived experiences of unemployed workers in the automotive manufacturing sector in Canada or abroad.

## **Methods**

### ***Design and Sample***

We chose a principally qualitative research approach based on phenomenological inquiry, which identifies the essence of a phenomenon and describes it through the lived experiences of those undergoing the condition or state of existence (Balls, 2009; Rose et al., 1995; Sorrell & Redmond, 1995). All participants were blue-collar workers who had been employed full-time or part-time in automotive assembly or parts manufacturing in the Durham Region of Ontario. Our sample comprised 22 male and 12 female ( $N = 34$ ) laid-off autoworkers from Durham Region. The investigation had institutional ethical approval from the University of Ontario Institute of Technology and conformed to Tri-Council Standards. Informed written consent was obtained from all participants. The study received support from the Canadian Autoworkers Union (CAW) Local 222 Community Action Centre in Oshawa, Ontario, where participants were recruited by means of purposive sampling. Purposive sampling is the most common sampling approach used in phenomenological research (Streubert Speziale & Rinaldi Carpenter, 2007). This method was chosen because we specifically targeted participants based on their particular knowledge of a phenomenon (i.e., being a laid-off autoworker). Recruitment posters were placed on community bulletin boards and in the CAW Local 222 Community Action Centre. Network (snowball) sampling techniques were also used (Polit & Tatano Beck, 2004).

### ***Measures and Analytic Strategies***

Those who consented to participate were asked to complete a short demographic and financial questionnaire and to take part in a focus group discussion related to their lived experiences of being unemployed and how it affected their overall health and well-being. Demographic and financial information related to gender, age, highest level of formal education completed, monthly household income, number of dependants, number of years employed in the automotive sector, and number of

	<b>Male n = 22</b>	<b>Female n = 12</b>	<b>Total N = 34</b>
<i>Age</i> (years)	42.9 ± 7.3 (20–52)	44.5 ± 10.3 (40–56)	44.3 ± 6.9 (20–56)
<i>Highest level of education completed</i> (high school)	10.2 ± 2.0 (9–12)	11.4 ± 1.8 (10–12)	(11.3 ± 1.7) (9–12)
<i>Monthly household income when employed</i>	3879 ± 142.3 (\$2,450–\$7,750)	3897.6 ± 1332 (\$3,200–\$8,000)	4026.9 ± 1407.2 (\$2,450–\$8,000)
<i>Monthly household income currently</i>	1532.3 ± 1285.5 (\$0–\$4,200)	1372.3 ± 1104.1 (0–\$3,676)	1596.6 ± 1550.8 (\$0–\$4,200)
<i>Number of dependants</i>	1.9 ± 1.4 (0–5)	1.3 ± 1.5 (0–4)	1.6 ± 1.5 (0–5)
<i>Number of years employed in automotive sector</i>	15.7 ± 7.3 (5.4–24.9)	14.2 ± 8.7 (2–31.7)	15 ± 8 (2–7)
<i>Number of months laid off at time of interview</i>	13.7 ± 9.4 (1–36)	11.9 ± 6.8 (1–29)	13.9 ± 10.1 (1–36)
Notes: All values shown are mean ± standard deviation. Ranges are shown in parentheses. All values have been rounded off to the first decimal place.			

months laid off at the time of the interview. Descriptive statistics, including means, standard deviations, and ranges, were computed from the demographic and financial information and are summarized in Table 1. Inferential statistics consisted of paired *T* tests to determine statistical significance between groups or conditions (e.g., unemployed vs. employed income levels) and a *P* value of ≤ 0.05 was deemed significant *a priori*.

The lived experiences of laid-off blue-collar automotive workers were examined qualitatively employing a phenomenological approach in a focus group setting. Phenomenology is defined as an approach to human inquiry that emphasizes the complexity of human experience and the need to study that experience holistically as it is actually lived (Balls, 2009; Rose et al., 1995; Sorrell & Redmond, 1995). Because phenomenological inquiry requires that the integrated whole be explored, it is a suitable method for the investigation of phenomena important to the profession of nursing (Streubert Speziale & Rinaldi Carpenter, 2007).

The focus groups consisted of between four and six participants and lasted from 2 to 2.5 hours. Light refreshments were provided. For standardization and consistency of approach, all focus groups were facilitated by the same member of the research team, who employed a semi-structured interview format consisting of three open-ended questions: *How has being laid-off affected your health and well-being? What health-care services are you currently utilizing? What health-care services are you currently in need of?*

The narrative responses were recorded and transcribed verbatim, categorized, and thematically analyzed. Quality assurance checks for data completeness and accuracy were performed on 40% of the raw data transcribed. Giorgi's (1985) seven-step process was used as the methodological guide for the interpretation of the qualitative data, which can be summarized as follows:

1. Read the entire description of the experience to get a sense of the whole.
2. Reread the description.
3. Identify the transition units of the experience.
4. Clarify and elaborate the meaning by relating constituents to each other and to the whole.
5. Reflect on the constituents in the concrete language of the subject.
6. Transform concrete language into the language or concepts of science.
7. Integrate and synthesize the insights into a descriptive structure of the meaning of the experience of being a laid-off autoworker.

## **Results**

Data were collected between September and November 2009 and a total of 22 men and 12 women ( $N = 34$ ) took part (see Table 1). The participants ranged in age from 20 to 56 years with a mean age of 44.3 years ( $\pm 6.9$ ). The highest level of high school completed was  $10.2 \pm 2.0$  for men and  $11.4 \pm 1.8$  for women. No participants had postsecondary training or education (e.g., community college or university).

Reported monthly household income while employed ranged from \$2,450 to \$8,000 with a mean of \$4,026.9 ( $\pm 1550.8$ ). As anticipated, we found that the reported monthly household income while unemployed had decreased, ranging from \$0 to \$4,200 with a mean of \$1,596.6 ( $\pm 1,550.8$ ). Moreover, a statistically significant difference was noted between employed and unemployed household monthly income ( $P < 0.001$ ). The number of dependants ranged from 0 to 5 with a mean of 1.6 ( $\pm 1.5$ ). The total number of years employed in the automotive sector ranged from 2 to 31.7 with a mean of  $15 \pm 8$ , and no significant differences were noted between unemployed men and women ( $P > 0.05$ ).

**Table 2 Major Health Issues Directly Attributed to Being Laid Off**

	<b>Male n = 22 (%)</b>	<b>Female n = 12 (%)</b>	<b>Total N = 34 (%)</b>
<b>Mental Health Issues</b>			
Stress/anxiety and depression	22 (100)	12 (100)	12 (100)
Lack of mental health resources to access services in the community	12 (54.5)	7 (58.3)	19 (55.9)
Altered sexual function and intimacy with partner	7 (31.8)	3 (25)	10 (29.4)
<b>Physical Health Issues</b>			
Occupational-related chronic pain and discomfort	16 (72.7)	8 (66.7)	24 (70.6)
Inability to access or afford health professionals, whether traditional (e.g., dentist) or alternative (e.g., chiropractor)	15 (68.2)	6 (50)	21 (61.8)
<b>Health Related to Financial and Social Issues</b>			
Inability to afford prescription medications	6 (27.3)	5 (41.7)	11 (32.4)
Need for alternative housing arrangements	4 (18.2)	3 (25)	7 (20.6)
Hardships experienced by family members	9 (40.9)	4 (33.3)	13 (38.2)

The total number of months laid off during the data-collection period ranged from 1 to 39 with a mean of  $13.9 \pm 10.1$ . No statistically significant differences were noted between unemployed male and female autoworkers ( $P > 0.05$ ).

Table 2 presents the number and percentage of participants experiencing selected health issues due to being laid off. These issues are summarized under three broad categories: mental health, physical health, and financial and social health. Each of these is described below.

**Mental Health Issues**

The first theme that emerged from the qualitative data was the high degree of stress, anxiety, and/or depression expressed by all participants (100%). For example, one male respondent stated, “I’m so stressed out. I look for work every day but there’s nothing out there for me, with no

university degree or trade.” Another man said, “It’s so stressful being in limbo, not knowing what the future holds. I can understand why some people go postal. I’m so stressed I’m going to develop an ulcer or die of a heart attack or something, I swear.”

Several respondents ( $n = 19$ ; 55.9%) expressed concern about the lack of resources in their community to help them manage their depression and other mental health issues after being laid off. A female respondent reported, “I can’t go to EAP [Employee Assistance Program] to get help with my depression and anxiety because I’m not a worker any more at GM . . . I have to suffer alone now.” A male respondent said, “There’s a long waiting list to access specialists in Durham who can help you work through these tough times . . . so you just have to [grit] you teeth and try to move forward solo.”

A third mental health theme that emerged from the focus groups was altered sexual function and intimacy due to emotional stress and problems sleeping ( $n = 10$ ; 29.4%). A male respondent said, “My manhood and ego hurt a lot since [I was] laid off at the factory. I hate being dependent on my girlfriend for food and rent. I can’t perform for my girlfriend because I’m really not in the mood, worrying all the time, and stress.” Similarly, a female respondent said, “Being laid off has been a big stress on my marriage. It’s taken away my identity and purpose in life . . . I can’t get to sleep because of all the worry and stress.”

### ***Physical Health Issues***

Another prominent theme was inability to effectively manage occupation-related chronic pain and discomfort ( $n = 24$ ; 70.6%). In fact, approximately three quarters of the respondents indicated that they suffered from chronic neck, knee, shoulder, and/or back pain attributable to the repetitive nature of assembly-line work. One male respondent stated, “Line jobs are really hard . . . the typical person doesn’t realize just how hard [the work] really is . . . The repetitive nature of the job really messes you up day after day after day. There’s no break or downtime on your body. Your shoulders, back, knees all hurt and you don’t feel like getting up to go to work in the morning. That’s why line workers are hooked on painkillers . . . 95% of the people I know took something to get through their shift.”

Respondents also reported that since being laid off they had ceased going to dentists, physical therapists, massage therapists, acupuncturists, and chiropractors to help manage their work-related pain and discomfort ( $n = 21$ ; 61.8%). This was attributed to the financial costs of these traditional (e.g., dentists) and alternative health-care professionals (e.g., chiropractors, registered massage therapists), whose services were not covered by the participants’ public health insurance plans and were no longer



covered by their former employers. A female respondent explained: “When I was working for GM, I used to go to a chiropractor and massage therapists regularly for my neck and back pain. It really made a difference . . . Now that my benefits have been cut, I can’t afford these guys any more and the pain has been a living hell.” Seven participants (20.6%) reported that they could not afford to visit a dentist despite the fact that they were in pain with suspected gum disease or dental caries that needed filling. A male respondent said, “I couldn’t afford a dentist, so I pulled out my own infected tooth with a pair of pliers.”

### ***Financial and Social Health Issues***

Another health concern was the cost of prescription medications ( $n = 11, 32.4\%$ ). A male respondent stated, “The costs of meds are too high, especially since they cut off all my drug benefits . . . I can’t afford all the pills I have to take for my heart, Crohn’s disease, and stuff. So I cut the pills in half or take them every other day.” A female respondent reported, “My husband had prostate cancer and it was really hard to pay for all the meds he needed to fight his cancer. We had to pay over \$500 every month to keep him alive . . . This is Canada . . . where is medicare when you really need it?” The following statement by another woman was a typical response by focus group members ( $n = 13; 43.8\%$ ): “What’s the point of seeing a doctor or going to a walk-in clinic anyway? . . . If they write you a prescription for a problem you have, you can’t afford to fill it . . . so what’s the point?”

The second financial and social theme was the need to make alternative housing arrangements due to inability to meet rent or mortgage obligations ( $n = 7; 21.9\%$ ). One respondent stated, “I lost my wife, then my home, after being laid off at GM. I couldn’t keep up with the payments.” Another said, “The severance package they gave me at GM is long gone . . . Now I live in my pickup truck and go to the food bank to feed myself. The cops come by and knock on my window to see if I’m okay.” Six participants (18.8%) indicated that they sold their home, downsized their apartment, broke their lease, were evicted, or moved in with relatives because they were unable to pay the rent: “I couldn’t afford to pay for a two-[bedroom] apartment for my wife and my daughter, who’s only 6 now, so I basically got evicted and thrown out on the street. I had to move in with my parents, which is pretty embarrassing given that I’m 32 years old now and can’t afford a place on my own.”

The third financial and social theme was the notable hardships and ripple effects for family members of the laid-off workers ( $n = 13; 38.2\%$ ). Seven participants (21.9%) indicated that their children were experiencing stress and anxiety and/or problems in school. A female respondent reported, “My daughter used to be an A student. This has hit

her hard . . . her marks have been dropping like a bomb.” Eleven respondents (32.4%) stated that since being laid off they could not afford new clothes for their children or memberships in clubs or sports programs (e.g., hockey, gymnastics). A male participant stated, “My two boys love to play hockey. We’re a hockey family and it’s what we do to bond with our kids. Since being laid off, I can’t afford to pay for new hockey equipment and membership in the league. To tell you the truth, I can’t even afford to pay for gas to drive them to hockey practice. So this has hit us all very hard indeed.”

### **Discussion**

Taken together, our findings suggest that unemployed autoworkers and their families experience negative effects on their health and well-being due to financial constraints and the termination of employee-based health benefits. These findings appear to be consistent with previous findings with respect to laid-off autoworkers (Adams, 1981; Browman, Hamilton, Hoffinan, & Marodlot, 1995; Hamilton, Browne, Hoffman, & Renner, 1990; Jin et al., 1995).

It is notable that all respondents in our focus group sessions reported high degrees of stress, anxiety, depression, and/or sleep disturbance following lay-off. This finding is consistent with those of Browman and colleagues (1995) and Hamilton and colleagues (1990), who found that automotive plant closures resulted in altered mental health, increased stress, and somatization disorder. It is important to note that these mental health issues (e.g., depression, high levels of anxiety) had not been apparent when our respondents were employed; although laid-off autoworkers reported increased levels of psychological stress, anxiety, and somatization disorder, there was little evidence that they sought more mental health services or counselling than previously. In contrast to our findings, Browman and colleagues (1995) found increased use of mental health services among unemployed blue-collar GM autoworkers in the United States, which was positively correlated with increased levels of psychological distress and self-blame. Nonetheless, our findings are consistent with those of other investigations that have reported increased incidence of mental health issues following lay-off in European Union countries due to the global recession of 2008–09 (de Belvis et al., 2012; Duleba et al., 2012; Giotakos et al., 2011; Hauksdottir et al., in press; Stuckler et al., 2011). To our knowledge, however, ours is the first qualitative investigation to examine the lived experiences of laid-off workers following the global recession and the first to examine its impact on blue-collar workers in Canada’s large automotive sector. The long-term health effects of unemployment for individuals and their families and dependants have

not been addressed in the empirical literature (Bezrucka, 2009; Leach-Kemon et al., 2012; Stuckler et al., 2011). Prospective studies examining health issues that arise as a consequence of unemployment would address this gap.

Our findings also suggest that unemployed autoworkers are reluctant to access private or public health services due to financial constraints. For example, our respondents were reluctant to seek out publicly funded health providers such as physicians to write prescriptions, due to termination of employee-based health benefits. Similarly, they were reluctant to seek the services of other traditional or alternative health professionals, including dentists, chiropractors, massage therapists, and acupuncturists. Our findings are not consistent with those of Jin and colleagues (1995), who report that unemployed factory workers in the United States had increased use of prescription medications and visits to physicians in comparison to employed workers. One of the limitations of our study is that we did not determine the total number or type of pre-existing medical conditions (e.g., heart disease, hypertension, diabetes, repetitive strain injuries) requiring prescription medications. Nonetheless, we can deduce that any pre-existing diagnosed condition requiring a prescription for its clinical management would be exacerbated by the inability to afford prescription drugs. Follow-up investigations are warranted to examine the impact of unemployment on pre-existing medical conditions and how these might be worsened by the inability to afford prescription medications.

Our findings indicate that the lived experiences of unemployed autoworkers have negative health ripple effects for their family members and dependants. Given that the family members of our participants were not interviewed and were not the target population for the study, we acknowledge this limitation with respect to the true impact on families and dependants. Hence, future investigations examining the impact on family members (e.g., spouse, partner, parent) of an unemployed person would provide more accurate and holistic insights into the negative ripple effects experienced by family members and dependants. Nonetheless, our findings are consistent with those reported in the literature related to unemployment and its effect on families and dependants (e.g., Brenner, 1987; Browman et al., 1995; D'Arcy, 1986; Hamilton et al., 1990; Jin et al., 1995).

To better understand how major economic recessions and associated unemployment affect the health of various regional populations requires an examination of the social determinants of health, including how communities share various resources among their members (Bezrucka, 2009; de Belvis et al., 2012). Fishback, Haines, and Kantor (2007) examined the negative health impacts associated with the Great Depression of the

1930s in 114 cities in the United States. They found that infant mortality rates in those cities actually declined during the period 1929 to 1940, linked to increased relief spending under the federal New Deal program. This program consisted of a series of job-creation measures to counter the effects of the Great Depression through enormous public works projects (e.g., roads and infrastructure). More recently, data from 23 nations collected by the Organization for Economic Cooperation and Development show that negative health effects associated with economic downturns are significantly less in nations with strong social safety nets (e.g., unemployment security benefits, housing supports, food security, early-life support, retraining programs) (Bezrucka, 2009; Gerdtham & Ruhm, 2006; Leach-Kemon et al., 2012).

We conclude that unemployment associated with the 2008–09 global economic recession had negative health effects for blue-collar workers in the auto-manufacturing sector located in the Durham Region of Ontario. Our findings suggest the need to embrace and implement various public health strategies to dampen the impact during economic downturns in Canada. Such strategies could include (1) identification of high-risk individuals affected by unemployment (e.g., autoworkers); (2) decreased wait times for community-based health and social services; (3) integration of social and health services for the most vulnerable groups identified; and (4) public health surveillance and tracking of disease and states of health (Bambra & Eilemo, 2009; Bauer & Thant, 2010; Stuckler et al., 2011). Public health nurses in Durham Region should seek to empower families by building partnerships with local, provincial, and national agencies, organizations, and governments to plan for and implement primary health care interventions that promote the health and well-being of all family members during economic downturns. Lastly, additional studies are warranted to examine the benefits and impact factor of these community-based health services for unemployed workers and their families during economic downturns.

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