

Résumé

Les liens entre la situation par rapport à l'emploi, les événements de vie stressants et la dépression chez les mères monoparentales

Joan Samuels-Dennis

Cette étude vise à comprendre davantage le rôle de la situation de l'emploi comme déterminant social de la détresse psychologique chez les mères monoparentales. Une enquête transversale étudiant les événements de vie stressants et la dépression a été réalisée auprès de 96 mères monoparentales (48 détenaient un emploi et 48 étaient bénéficiaires d'aide sociale [AS]), de novembre 2003 à mars 2004. La prévalence de symptômes de dépression était significativement supérieure chez les bénéficiaires d'AS. Des symptômes légers, modérés et graves ont été rapportés chez respectivement 2 %, 23 % et 67 % des bénéficiaires d'AS. Le taux d'événements stressants était nettement plus élevé chez les assistées sociales. De plus, ces dernières ont signalé la présence d'un plus grand nombre d'agents stresseurs liés au logement, à la santé, aux interactions sociales et à l'argent. Une analyse de régression a indiqué que 40,6 % de la variation relative aux symptômes de dépression chez les mères monoparentales étaient liés à la situation de l'emploi et aux événements stressants. Les résultats indiquent que la situation par rapport à l'emploi exerce un impact important sur le bien-être psychologique des femmes. L'auteure identifie les implications concernant la pratique infirmière, l'élaboration de politiques et la future recherche, et discute de ces éléments.

Mots clés : dépression, stress, mères monoparentales, aide sociale

Relationship among Employment Status, Stressful Life Events, and Depression in Single Mothers

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This purpose of this study was to extend our understanding of employment status as a social determinant of psychological distress among single mothers. A cross-sectional survey assessing stressful life events and depression was completed with 96 single mothers (48 employed and 48 social assistance [SA] recipients) between November 2003 and March 2004. The prevalence of depressive symptoms was significantly higher for the SA recipients. Mild, moderate, and severe depressive symptoms were reported by 2%, 23%, and 67%, respectively, of SA recipients. Total stressful events were markedly greater for SA recipients. In addition, SA recipients reported larger numbers of housing, health, social, and financial stressors. Regression analysis indicated that 40.6% of the variation in depressive symptoms among single mothers was explained by their employment status and stressful events. The findings suggest that women's employment status significantly impacts on their psychological well-being. Implications for nursing practice, policy development, and future research are identified and discussed.

Keywords: determinant of health, depression, stress, single mothers, welfare

Introduction

Among the many social and economic factors that influence and shape the health of Canadians, income has been identified as the single most important determinant of health (Raphael, 2004). For the 12.7% of Canadian families headed by single mothers (Statistics Canada, 2001), poverty is a particular challenge to psychological well-being (Avison, 2002). Single mothers, when compared to the general population, have almost double the 12-month prevalence rates of depression (15.4% vs. 7.9–8.6%) (Cairney, Thorpe, Rietschlin, & Avison, 1999).

Single mothers receiving social assistance (SA) are at particularly high risk for psychological distress because of established relationships between mental illness and family structure (Avison, 2002), poverty (Belle, 1990; Bryne & Brown, 1998; Gyamfi, Brooks-Gunn, & Jackson, 2001), and life adversities (Davies, Avison, & MacAlpine, 1997; Ford-Gilboe, Berman, Laschinger, & Laforet-Flieser, 2000; Tolman & Rosen, 2001). The chronic strains that accompany single motherhood, including economic hardship, parental stress, and role strain, have been credited with much of

the responsibility for the disproportionate burden of mental illness experienced by this population (Avison).

Having identified single-parent families as vulnerable to increased risk for poor health, the National Children's Agenda has, over the past three decades, launched national and provincial health promotion programs (i.e., Healthy Babies Healthy Children, Ontario Early Years Initiatives, and Community Action for Children) directed at improving the health status of at-risk families with children under 6 years of age (Ministry of Health and Long-Term Care, 2002; National Children's Agenda, 2005). Historically, nursing interventions offered by such programs have focused on enhancing the social competencies or personal resilience of single parents and have often failed to address the socio-economic factors that contribute to the heightened risk for health disparities among single-parent families.

This article highlights the findings of an exploratory study examining the influence of the socio-economic context of single mothers' lives on their psychological well-being. A premise of the study was that family structure alone is not a risk factor for poor health. It is acknowledged, however, that single mothers are a heterogeneous group with significant differences in level of education, employment and socio-economic status, access to resources, and life experiences (Ford-Gilboe et al., 2000). Given that these differences may affect one's vulnerability to psychological distress, it is essential for the development of group-specific nursing interventions that nurse researchers identify those subgroups of single mothers in which mental health disparities are most pronounced.

Literature Review

The Stress Process Model (Pearlin, 1989, 1999, 2002) provided the theoretical framework for the study. According to this model, stress is a dynamic and evolving process that incorporates three core elements: stressors, stress moderators, and stress outcomes.

Stressors

In general, stressors are tension-producing stimuli or forces — problems, hardships, or threats — whose reduced impact requires the mobilization of cognitive and behavioural efforts (Pearlin, 1999, 2002; Wheaton, 1999). Pearlin (1999, 2002) and Wheaton identify three primary categories of social stressor: life events, chronic stressors, and trauma. Life events are significant life changes that are discrete and observable, have a relatively clear onset, and have a well-defined set of sub-events that progress from stressor initiation to stressor termination. In contrast to life events, chronic stressors or strains arise insidiously and may either surface repeat-

edly or maintain a presence over a considerable period of time. Chronic stressors represent the enduring problems, conflicts, and threats that individuals face in their daily lives and that may arise from systems of inequality such as class, institutionalized social roles, social networks, neighbourhoods and communities, or households (Pearlin, 1999, 2002; Wheaton). Traumatic events are typically more severe than normal stressful events; they occur both as isolated events and as long-term chronic events, and, because of their level of severity, their impact is long-lasting (Pearlin, 1999, 2002; Wheaton). Traumas include a potentially wide range of severe situations and events, including war, natural disasters, sexual abuse during childhood or adulthood, and physical violence and abuse.

A key feature of the Stress Process Model is what Pearlin (2002) calls *stress proliferation*. This refers to the human reality that individuals are frequently exposed to multiple stressors that may negatively impact on their well-being (Pearlin, 2002). According to the Stress Process Model, exposure to one set of stressors eventually leads to other stressors (Pearlin, 2002). Job loss, for example, is a precursor to chronic financial strain, which increases single mothers' risk for insufficient food, housing insecurity, and psychological distress or depression.

In addition to socio-economic disadvantages, a wide range of life adversities in both early and adult life have been identified as significant contributors to higher rates of psychological distress among single mothers (Avison, 2002; Davies et al., 1997; Ford-Gilboe et al., 2000). McLanahan (1983) examined the relationship between family headship (single-mother and two-parent families) and three types of stressor: chronic life strains (demographic characteristics — race, income, age); major life strains (events that lead to a disruption of social networks or life patterns); and the absence of social and psychological support. That study revealed that single-mother families were more likely than other families to experience chronic strains commonly associated with poverty, being black, and being less educated. Income change, change in household composition, and residence change were identified as the major life events most frequently experienced by single mothers. In other studies (Scarini, Ames, & Brantley, 1999; Wagner & Menke, 1991) with low-income single mothers, the most common stressful life events reported were related to intra-family strains, finance, work-family transitions, health status of individuals and family, and change in social activities.

An important life adversity endemic to single-parent families, particularly those receiving SA, is intimate partner violence (IPV). Tolman and Rosen (2001) used data from a random sample of women from welfare caseloads in Michigan County, in the United States, to investigate the

prevalence of domestic violence and its association with mental health, physical health, and economic well-being. They found 12-month and lifetime prevalence rates of IPV to be 25% and 62.8%, respectively. Ford-Gilboe et al. (2000), in a community sample of 236 single mothers, found that 86%, 78%, 65%, and 52% had experienced emotional, verbal, physical, and sexual abuse, respectively, during their lifetime. Compared to women who had never experienced intimate partner abuse, recent victims had markedly higher rates of five psychiatric disorders: depression, generalized anxiety disorder, post-traumatic stress disorder, drug dependence, and alcohol dependence (Tolman & Rosen). In addition, chronic strains most frequently reported by IPV survivors include financial strain, homelessness, eviction, discontinuation of utility services, food insufficiencies, physical and mental illness, and harassment (Campbell, 2002; Ford-Gilboe et al.; Tolman & Rosen).

Stress Moderators

Early research relevant to stressful life events was based on the assumption that all life events (positive or negative) are potentially stressful, with the degree of stressfulness varying with the magnitude of readjustment required by the specific event (Holmes & Rahe, 1967). Research has since revealed that stressor impact (beneficial or detrimental) is determined by five factors: the time-frame in which the stressor occurs, the past and present mental and physical health status of the individual, the nature and intensity of the stressor, the amount of energy required by the individual to adjust, and, most important, the moderating resources available to the individual (Davies et al., 1997; Pearlin, 2002; Wheaton, 1999).

Moderators, including the individual's coping repertoire, level of social support, and mastery (sense of control over one's life), represent the social and personal resources that individuals and families mobilize to contain, regulate, or otherwise ameliorate the effects of stressors (Pearlin, 2002). Moderating resources help us to understand why individuals exposed to the same stressors experience an array of different outcomes. Moderators serve a protective function that can be exercised in three ways: by acting proactively to preclude or prevent the occurrence of a stressor, by modifying or minimizing the harmful impact of stressful conditions, and by perceptually controlling the meaning of the stressor in ways that reduce their threat and potential painful consequences. From the few studies that have examined the coping repertoire of single mothers, it is evident that this population uses an array of strategies to manage chronic and traumatic stress, including active and passive strategies such as obtaining social support, seeking spiritual guidance, engaging in active problem-solving, and using passive appraisal or avoidant coping

(Felsten, 1998; Hall, Gurley, Sachs, & Kryscio, 1991; Wagner & Menke, 1991). For further exploration of coping as a moderator of stress, see Pearlin (1989, 1999, 2002) and Pearlin and Johnson (1977).

Stressor Outcomes

The final major component of the Stress Process Model is the outcome (Pearlin, 2002). Outcome refers to physiological and psychological manifestations of “organismic” stress (Pearlin, 1989). Studies looking at stress and health outcomes among single mothers often compare single-parent families with two-parent families and have consistently documented greater psychological distress among separated and divorced parents than among two-parent families (Avison, 2002; Cairney et al., 1999; Davies et al., 1997; Lipman, Offord, & Boyle, 1997). The authors of these studies suggest that dissolution of a marital or common-law relationship is often accompanied by increased levels of stress or chronic strain (for example, economic hardship, parenting difficulties, and child-care demands) that continue long after the divorce or separation and, consequently, increase single mothers’ risk of experiencing psychological distress or depression (Avison). Consistent with the Stress Process Model, much of this work has purposely attempted to uncover the ways in which single mothers’ response to stress differs not only by family structure but also by social and economic status (Pearlin, 1999, 2002). Pearlin (1999, 2002) proposes that the stress process occurs within a social context whereby life events and/or chronic strains largely arise from, and are influenced by, social structures and people’s location within them. Finding its roots in critical social theory, the model suggests that systemic embodiment of unequal distribution of resources and opportunities inevitably results in stressful conditions for those with the lowest status (Pearlin, 1999, 2002).

Researchers examining the association between childhood adversity and mental health suggest that childhood maltreatment (physical, emotional, and sexual abuse) creates early vulnerability to psychiatric difficulties that is activated by periods of interpersonal stress in later life (Davies et al., 1997; Lipman et al., 1997). Davies et al. used data from a case-comparison longitudinal survey of single and married mothers in London, Ontario, to examine the relationship between early-life adversities, depressive episodes, and family structure. Higher rates of depression among single mothers were related to greater exposure to stressors (i.e., low maternal attachment, parental depression, parental substance abuse, and child abuse/neglect) in the woman’s family of origin that, in turn, increased the likelihood of early-onset depression and subsequent depressive episodes.

The association between poverty and psychological distress among single mothers is well documented (Avison, 2002; Bryne & Brown, 1998;

Gyamfi et al., 2001; Lennon, Blome, & English, 2001). Among single mothers with the lowest incomes, the 12-month prevalence rate of major depressive disorder ranges from 12% to 36% (Lennon et al.). Bryne and Brown's assessment of depression levels among single mothers receiving SA revealed that 32.5%, 10.4%, and 2.5% reported symptoms consistent with major depression, dysthymia (moderate chronic depression), and double depression (major depression and dysthymia), respectively.

Employment, regardless of income, offers some protection against depressive episodes (Belle, 1990). Hall, Williams, and Greenberg (1985) examined the relationship between social support, everyday stressors, and mental health in a sample of low-income single mothers. They report that mothers who had extremely low incomes or were unemployed were more likely to report severe depressive symptoms (48%). More recently, Gyamfi et al. (2001) investigated the association between financial strain and maternal depressive affect among single mothers who were formerly ($n = 95$) and currently ($n = 95$) receiving SA. Employed mothers reported fewer symptoms of depression and stress than non-employed mothers. However, for those women transitioning from welfare to work, being employed did not reduce financial strain. The authors suggest that the lack of change in financial strain reflects the fact that a majority of single mothers transitioned from welfare to low-paying jobs without benefits. They also note that while employed mothers continued to experience financial strain, the strain no longer affected the level of depression. Among the unemployed, however, financial strain was positively correlated with depression. The authors surmise that employment and a resultant increase in levels of perceived self-efficacy may mediate depressive symptoms.

Low-income women are the target of many social programs, ranging from welfare and workfare programs to interventions designed to prevent problems in pregnancy and to enhance maternal competence. While research has identified factors that may cause psychological distress in single mothers, few studies have specifically examined variations in stressful events and psychological distress among single mothers caused by differences in employment status or access to income. A greater understanding of the factors that contribute to health disparities among subgroups of single mothers is essential for the development of effective public health nursing interventions.

Purpose and Hypotheses

The purpose of this study was to assess the association between employment status or access to income, stressful life events, and depression among single mothers. Three hypotheses were formulated: Hypothesis 1:

SA recipients will report greater stressful events than employed single mothers. Hypothesis 2: SA recipients will report greater depressive symptoms than employed single mothers. Hypothesis 3: Employment status and stressful events will predict depression among single mothers.

Method

Design

This cross-sectional, descriptive correlational study used survey data to assess predictors of depression in two groups of single mothers, those employed and those receiving SA, as part of a larger study examining the association between employment status, stressful events, coping repertoire, and psychological distress (Samuels-Dennis, 2004).

Participants

A convenience sample of 96 single mothers (48 employed and 48 receiving SA) was recruited from community agencies in a large city in the Canadian province of Ontario. Power analysis determined that a sample of 91 single mothers was needed based on $\alpha = .05$, multiple regression with five independent variables, and a medium effect size (Cohen, 1992). Women were asked to participate in the study if they met the following criteria: (a) 18 years or older; (b) self-identified as a separated, divorced, widowed, or never-married woman who was the primary caregiver of at least one child 4 to 18 years old; (c) employed or receiving SA; and (d) fluent in English.

Women were recruited using: (a) contacts in health and social agencies that provide services to single mothers and their children; (b) a list of active SA recipients generated by Ontario Works, the provincial welfare provider; and (c) referral of other single mothers by the study participants. Twenty-one potential Ontario Works participants could not be reached because of cancelled telephone service. Of the 74 SA recipients contacted, 70 agreed to participate and 48 returned completed questionnaires, for a response rate of 68%. Of the 75 employed single mothers contacted, 73 agreed to participate and 48 returned completed questionnaires, for a response rate of 65.8%. The combined response rate across the two groups was 67%.

Instruments

Exposure to stressful life events was captured using the Social Readjustment Rating Scale (SRRS) (Holmes & Rahe, 1967). The SRRS was developed to identify the incidence of recent life changes and to measure the intensity of anticipated readjustment to 43 specific life events. It is a short survey in checklist form that assesses participant

exposure to stressors such as divorce, physical illness, and financial difficulties. Life Change Units (LCUs), assigned to the various life events, allow researchers to determine the cumulative amount of stress an individual has experienced over a 24-month period. The SRRS was adapted to assess single mothers' exposure to chronic strains, daily hassles, and traumatic stressors. The LCU component of the scale was excluded and eight stressors relevant to woman abuse, mental illness, and homelessness that were not previously captured using the SRRS were added to the checklist. Single mothers were asked to indicate if they had encountered specific events in the past 24 months by checking the appropriate box. The total number of life events experienced was computed by summing the number of checked boxes. Possible scores ranged from 0 to 51, with higher scores indicating more stressful events. Face validity of the revised SRRS was determined by a panel of three experts. Test-retest scores for the unaltered SRRS range from .72 to .91 and internal consistency ranges from .59 to .83 (Holmes & Rahe). In this study, Cronbach's alpha reliability coefficient was .69.

The BDI-II is a self-report instrument designed to measure the severity of depression in adults and adolescents aged 13 years and older (Beck, Brown, & Steer, 1996). It contains 21 items and was developed to assess symptoms corresponding to the criteria for diagnosing depressive disorders listed in the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders, 4th Edition* (DSM-IV) (Beck et al.). Participants were asked to indicate the extent to which they had experienced each symptom on a four-point Likert scale (0 = I do not feel sad; 3 = I am so sad or unhappy that I can't stand it). A total score is computed by summing the ratings of all 21 items and reflects the following clinical interpretation: 0 to 13, minimal depression (representing normal ups and downs of everyday living); 14 to 19, mild depression; 20 to 28, moderate depression; 29 to 63, severe depression (Beck et al.). Internal consistency and 1-week test-retest values range from .92 to .93. In the present study, Cronbach's alpha reliability coefficient was .93.

Data Collection

After ethical approval had been obtained, a questionnaire was delivered or mailed to the homes of women who had consented to participate. No incentives were offered for participation in the study. A return envelope with prepaid postage was included with each questionnaire. Participants completed and returned the questionnaire by mail. Follow-up phone calls were made to those single mothers who had not returned the questionnaire after 3 months.

Data Analysis

Data were analyzed using SPSS Version 12. Descriptive statistics appropriate to the level of measurement were generated for all study variables. *T* tests were used to test hypotheses 1 and 2, while multiple regression analysis was used to examine the extent to which employment status and stressful life events contributed to variations in depressive symptoms among the single mothers. The significance level for all analyses was $\alpha = .05$.

Results and Discussion

Demographic comparisons between employed mothers and mothers receiving SA are presented in Table 1. Comparative analysis revealed that the two groups were similar in age ($\bar{x}_E = 38.60$, $SD = 7.203$, $\bar{x}_{SA} = 40.0$, $SD = 6.425$, $t = -.990$, $p = .325$). However, SA recipients had a significantly larger number of children currently in their care ($\bar{x}_E = 1.92$, $SD = .942$, $\bar{x}_{SA} = 2.42$, $SD = 1.048$, $t = -2.458$, $p = .016$). Chi-square analysis indicated marked differences in racial makeup of the groups ($\chi^2 = 19.337$, $p = .001$) and the highest level of education reached ($\chi^2 = 26.736$, $p = .001$).

Hypothesis 1

The first hypothesis was that SA recipients would report more stressful events than their employed counterparts. As predicted, SA recipients encountered a larger number of stressful life events than employed mothers ($\bar{x}_E = 6.94$, $\bar{x}_{SA} = 8.81$, $t = -2.233$, $p = .028$; see Table 2). Financial strain was more pronounced among SA recipients (50% vs. 18.8%), as this group reported that their financial status was much worse than usual, experienced greater difficulty paying their rent or mortgage (56.3% vs. 16.7%), and were more frequently evicted from their homes (8.3% vs. 0%). Employed mothers reported significantly greater improvements in their financial status (20.8% vs. 0%) and a greater amount of the financial stability required to obtain a loan for a major purchase such as a car or mortgage (33.3% vs. 0%).

The results prove the hypothesis that employment does offer protection against poor health. SA recipients reported significantly greater health problems (physical, mental, and social). In the 2 years prior to completion of the questionnaire, 79.2% of SA recipients, compared to 22.9% of employed mothers, experienced a serious physical or mental illness; in addition, they reported a considerably larger number of personal injuries or accidents (25.0% vs. 8.3%) and more frequent minor illnesses (54.2% vs. 31.3%).

Table 1 Sociodemographic Characteristics of Single Mothers, by Employment Status

	Employment (n = 48)		Social Assistance (n = 48)	
	<i>n</i>	%	<i>n</i>	%
Race				
Caucasian	14	29.2	21	43.8
Afro-Canadian	27	56.3	11	22.9
Native	1	2.1	1	2.1
South Asian	1	2.1	9	18.8
Asian	4	8.3	1	2.1
Latino	1	2.1	3	6.3
Arabic	0	0.0	1	2.1
Other	0	0.0	1	2.1
Number of Children				
1	18	37.5	9	18.8
2	20	41.7	19	39.6
3	7	14.6	13	27.1
4	2	4.2	5	10.4
5 or more	1	2.1	2	4.2
Annual Income				
\$0–19,999	4	8.5	47	97.9
\$20,000–39,999	23	48.9	1	2.1
\$40,000–59,999	10	21.3	0	0.0
\$60,000–79,999	9	19.1	0	0.0
\$80,000 and above	1	2.1	0	0.0
Marital Status				
Single	22	45.8	20	41.7
Separated	14	29.2	7	14.6
Divorced	12	25.0	19	39.6
Widowed	0	0.0	2	4.2
Level of Education				
Grade school	0	0.0	5	10.4
High school	9	18.8	27	56.3
College/university	27	56.3	15	31.3
Graduate/professional	12	25.0	1	2.1

Table 2 Comparison of Stressful Events According to Employment Status

Stressful Event	Employed (n = 48)		Social Assistance (n = 48)		t	
	%	\bar{x}	%	\bar{x}		
		SD		SD		
Started/changed school	14.6	.15	.357	.21	.410	-0.796
Graduated from school	22.9	.23	.425	.13	.334	1.335
Problems in school	4.2	.04	.202	.08	.279	-0.838
Failed school	2.1	.02	.144	.00	.000	1.000
Got married	2.1	.02	.144	.00	.000	1.000
Marital separation	12.5	.13	.334	.08	.279	0.663
Divorce	10.4	.10	.309	.15	.357	-0.612
Reconciled relationship	10.4	.10	.309	.06	.245	0.733
Increased arguments with partner	20.8	.21	.410	.08	.279	1.744
Improved relations with partner	10.4	.10	.309	.08	.279	0.347
Emotionally abused by partner	20.8	.21	.410	.23	.425	-0.244
Physically abused by partner	2.1	.02	.144	.04	.202	-0.581
Sexually abused by partner	0	.00	.000	.02	.144	-1.000
Change in residence	41.7	.42	.498	.40	.494	0.206

Table 2 (cont'd)

Stressful Event	Employed (n=48)		Social Assistance (n=48)		t		
	%	\bar{x}	SD	%		\bar{x}	SD
Repeated difficulty paying rent or mortgage	16.7	.17	.377	56.3	.58	.539	-4.374*
Eviction from home	0	.00	.000	8.3	.08	.279	-2.067*
Mortgage or loan for a major purchase	31.3	.31	.468	0	.00	.000	4.622*
Foreclosure of mortgage or loan	0	.00	.000	0	.00	.000	-
Pregnancy	8.3	.08	.279	8.3	.08	.279	0.000
Abortion	2.1	.02	.144	8.3	.46	.504	-1.377
Gained new family member	6.3	.31	.468	2.1	.02	.144	1.016
Son or daughter left home	6.3	.06	.245	22.9	.23	.425	-2.356*
Change in amount of contact with family members	31.3	.06	.245	45.8	.08	.279	-1.469
Trouble with in-laws	14.6	.46	.504	4.2	.65	.483	1.761
Change in amount and type of recreation	45.8	.15	.357	64.6	.04	.202	-1.861
Change in church activities	33.3	.33	.476	54.2	.54	.504	-2.082*
Change in social activities	47.9	.48	.505	68.8	.69	.468	-2.096*
Physical or mental illness	22.9	.23	.425	79.2	.79	.410	-6.598*
Personal injury or accident	8.3	.08	.279	25.0	.25	.438	-2.224*

Death of a close friend	8.3	.08	.279	14.6	.15	.357	-0.956
Death of a close family member	20.8	.27	.676	31.3	.38	.703	-1.159
Death of a pet	2.1	.02	.144	10.4	.10	.309	-1.694
Change in health of family member	20.8	.21	.410	20.8	.21	.410	0.000
Frequent minor illness	31.3	.31	.468	54.2	.54	.504	-2.309*
Minor violation of the law	6.3	.06	.245	6.3	.06	.245	0.000
Jail time served	0	.00	.000	0	.00	.000	-
Loss, robbery, or damage of personal property	10.4	.10	.309	20.8	.21	.410	-1.405
Vacation	39.6	.40	.494	6.3	.06	.245	4.188
Spouse started/stopped work	4.2	.04	.202	0	.00	.000	1.430
Started work for the first time	14.6	.15	.357	22.9	.23	.425	-1.041
Promotion	8.3	.08	.279	4.2	.04	.202	0.838
Demotion	0	.00	.000	0	.00	.000	-
Laid off from work	10.4	.10	.309	14.6	.15	.357	-0.612
Fired from work	2.1	.02	.144	6.3	.06	.245	-1.016
Trouble with boss or co-workers	18.8	.19	.394	6.3	8.81	3.595	1.866
Major improvement in financial status	20.8	.21	.410	0	.00	.000	3.517*
Financial status a lot worse than usual	18.8	.19	.394	50.0	.50	.505	-3.378*
Total Stressors	-	6.94	4.573	-	8.81	3.595	-2.233*

* $p < .05$; t value not calculated due non-occurrence.

Social interaction evident in changes to church and social activities was significantly greater among SA recipients (54.2% vs. 33.3% and 68.8% vs. 47.9%, respectively). In addition, change in family composition (a son or daughter leaving home) was reported more frequently by SA recipients (22.9% vs. 6.3%). These results speak not only to the limited amount of social interaction available to single mothers receiving SA, but also to the poor quality of social interaction and the social exclusion that is endemic to this population (Nezlek, Hampton, & Shean, 2000; Raphael, 2004).

Hypothesis 2

The second hypothesis was that single mothers receiving SA experience higher levels of depressive symptoms than employed single mothers. SA recipients were found to experience significantly higher levels of depressive symptoms than their employed counterparts ($t = -7.634, p < .000$). Mean BDI-II scores for the employed and SA groups were 13.85 ($SD = 9.694$) and 30.79 ($SD = 11.907$), respectively. This finding is alarming when compared to Bryne and Brown's (1998) finding of 32.5% of SA recipients experiencing major depression and 10.4% moderate depression. As expected, a disproportionate burden of illness is carried by SA recipients. Among SA recipients, 66.7% and 22.9% reported symptoms consistent with severe and moderate depression, respectively, while for the employed group the figures were 14.6% and 25.0%. In a broader context, employed mothers experienced depression at twice the rate for the general population, while SA recipients experienced depression at 11 times the rate for the general population (Health Canada, 2002).

Hypothesis 3

Hierarchical multiple regression analysis was used to examine the extent to which employment status and stressful events predict depression among single mothers (Table 3). Prior to analysis, employment status was dummy coded in the following way: 1 = employed full time or part time; 2 = SA. Demographic variables, including employment status, age, and number of children, were entered at step 1 of the analysis, while the number of stressful events was entered at step 2. At step 1, mother's age, number of children, and employment status predicted 37.7% of the variance in mother's depression [$F(3.89) = 17.951, p = .000$]. At step 2, the addition of stressful events contributed an additional 2.9% to the explained variance of depressive symptoms, and this change was significant [$F(4.88) = 4.290, p = .041$]. The final model (age, number of children, employment status, and stressful events) explained 40.6% of the variance in depressive symptoms, with employment status being the primary contributor ($\beta = .591, p = .000$).

Table 3 *Predictors of Depression among Single Mothers*

Step	R	R Square	Adjusted R Square	Standard Error of the Estimate	
1	.614 ^a	.377	.356	10.831	
2	.637 ^b	.406	.379	10.636	
Final variables in the equation					
		Standardized Coefficients		Correlations	
Steps		Beta	t	Sig.	Partial Part
1 Age		-.043	-.514	.608	-.054
Number of children		-.112	-1.292	.200	-.136
Employment status		.637	7.309	.000	.612
2 Age		-.014	-.166	.868	-.018
Number of children		-.100	-1.166	.247	-.123
Employment status		.591	6.687	.000	.580
Total stressful life events		.178	2.071	.041	.216
Tolerance = .919.					
^a Predictors: employment status, age, number of children.					
^b Predictors: employment status, age, number of children, total stressful life events.					

There are two explanations for the patterned association between socio-economic status (SES) and mental illness (Yu & Williams, 1999). The social-selection hypothesis suggests that mental illness keeps individuals from obtaining or retaining jobs that would preserve their SES status or enhance their social mobility. Within this perspective, it may be argued that the presence of mental illness, perhaps in childhood or early adolescence, leads to lower socio-economic status by interfering with the single mother's ability to advance her education or acquire appropriate job skills (see Gyamfi et al., 2001). In contrast, the social-causation hypothesis argues that socio-economic adversities linked to low-SES positions cause or exacerbate mental health problems among single mothers (Yu & Williams). The Stress Process Model represents a social-causation hypothesis, and the findings of this study illustrate that single mothers in the lowest socio-economic positions do indeed experience higher rates of psychological distress and functional impairment. While employment or

access to income does not explain single mothers' depression entirely, the socio-economic context of women's lives accounts for a considerable portion of single mothers' psychological well-being; 98% of SA recipients, compared to 8.5% of employed mothers, had incomes below \$20,000, a finding that has fundamental implications for access to the social and material resources (e.g., food, shelter, transportation, and social activities) needed to promote one's health (Raphael, 2004).

Discussion and Implications

The purpose of this study was to examine the factors that contribute to health disparities among subgroups of single mothers. Specifically, the study explored the association between employment status, stressful experiences, and depressive symptoms. The findings present us with some significant health promotion challenges and opportunities. Health promotion represents a comprehensive social and political process that embraces not only actions directed at strengthening the skills and capabilities of individuals, but also actions directed at changing social, environmental, and economic conditions so as to reduce their negative impact on individual health (World Health Organization, 1986). The findings of this study present a number of health promotion challenges and opportunities for both SA programs such as Ontario Works and public health nursing. They suggest that, first, workfare programs intended to address the mental health concerns of single mothers could achieve greater success in ensuring the mothers' ability to obtain and sustain employment; second, the prevalence and severity of depression among single mothers indicate the need for a reorientation of health services towards a multidisciplinary approach to mental health promotion; and third, the need to ensure that the basic necessity of single-parent families for food and secure housing is met through the development of healthy public policies.

In recent years, federal and provincial governments in Canada have invested extensive resources in the reform of SA and welfare programs. Ontario Works currently provides temporary financial assistance to those individuals who are determined to be most in need while they satisfy obligations to find and retain employment (Ministry of Community and Social Services, 2001). Implicit to welfare reform is the assumption that SA recipients are similar, in status and function, to the general population. However, the findings of this study suggest that mental health concerns pose a strong barrier to employment. Ecologically sound workfare strategies are needed to address the many factors that affect women's employment status, including physical and mental illness and lack of employment training, child care, and social support (Youngblut,

Brady, Brooten, & Thomas, 2000). When the Bough Breaks (Browne et al., 2001) is one ecologically sound intervention program that has proved effective in reducing levels of dysthymia, enhancing social adjustment, and increasing single mothers' success in obtaining and sustaining employment. It speaks to the social and economic feasibility of providing single mothers receiving SA with services such as health promotion and case management, recreation and skill development for children, employment retraining, and child care.

The pervasive functional impairments that accompany depression require a multidisciplinary approach whereby mental health professionals (i.e., nurses, general practitioners, psychologists, psychiatrists, and lay practitioners) use a number of strategies to enhance the social functioning, coping capacity, and health promoting behaviours of single mothers. The findings of this study suggest that single mothers who experience psychological distress would be most effectively served by health and service providers who use an array of mental health promotion strategies appropriate to the multiple problems that single mothers may experience over their lifetime — for example, IPV, homelessness, and economic hardship. Nurses with advanced knowledge and understanding of mental illness, including its assessment, diagnosis, and management, have an essential role to play in helping single mothers to manage and overcome psychological distress. An intervention study conducted by Beeber, Holditch-Davis, Belyea, and Funk (2004) demonstrated the feasibility of master's-prepared nurses positively impacting on not only single mothers' mental health status but also their success in managing depressive symptoms, improving problematic life issues, accessing social support, and parenting effectively while symptomatic. It is important to note, however, that enhanced expertise must be accompanied by a conscious and systematic effort to understand the context and culture of single mothers' lives. Likewise, nursing interventions for single mothers must be innovative and tailored to their personal needs and life goals (Beeber et al.; Cauce et al., 2000).

Public health nurses are ideally positioned to influence the development of public policies designed to reduce chronic and daily stressors that may exacerbate psychological distress among single mothers. The findings of this study suggest that housing insecurity is an important stressor for single mothers, particularly those receiving SA. Adequate living allowance and rent geared to income programs would significantly reduce this problem. While the average rent for a two-bedroom apartment in Ontario is \$1,165, a single mother with two children currently receives SA of \$1,215 monthly (Canadian Council on Social Development, 2003). The socio-economic conditions under which single mothers live increase their risk for homelessness. Risk for homelessness and its

negative impact on the psychological well-being of single mothers cannot be underestimated (Bogard, Trillo, Schwartz, & Gerstel, 2001). Bassuk, Browne, and Bucker (1996) identify three factors that greatly affect the ability of a poor single mother to retain housing: lack of education ensures that single mothers have the lowest-paying jobs and will likely live below the poverty line even when employed full time; frequently, one quarter of a single mother's monthly income goes to child care; and pervasive physical, emotional, and sexual violence, in both childhood and adulthood, decreases single mothers' physical, emotional, and social well-being and, in turn, their ability to work outside the home. As posited by the Stress Process Model, the present findings suggest that the health of single mothers is determined by the structural social inequality that predominates in Canadian society (Avison, 2002; Davies et al., 1997; Pearlin, 1989; Tolman & Rosen, 2001). The involvement of public health nurses in developing public policies designed to address the structural inequalities that impede single mothers' access to food and secure housing is essential to promoting the mental health of those mothers.

This study has several limitations. The cultural diversity of the sample (Caucasian 36.8%, Afro-Canadian 40%, Aboriginal 1.1%, South Asian 10.5%, Asian 5.3%, Latino 4.2%, Arabic 1.1%) may limit the generalization of its findings to less culturally diverse populations. Second, a substantial number of women ($N=21$) who were eligible for participation in the study were not included because their telephones had been disconnected. This group might have presented data different from those presented by women who were able to maintain their telephone subscriptions and consequently participated in the study. Third, the modified SRRS was not pretested and was by no means exhaustive of the types of stressor frequently encountered by single mothers. Fourth, the small sample size precluded an examination of whether depressive symptoms were similar for those single mothers who were employed but whose incomes resembled those of SA recipients. A larger sample, including single mothers from three socio-economic groups — those employed with middle and high incomes, those employed with low incomes, and those receiving SA — would allow researchers to examine this issue more thoroughly. Additionally, comparable studies may employ a qualitative or mixed-method (quantitative and qualitative) approach to exploring the incidence of stressful events not captured by the SRRS, as well as the perceived positive or negative impact of those stressors. Another essential area for further investigation is the prevalence of comorbid conditions — more than one mental illness such as post-traumatic stress disorder, anxiety disorders, and bipolar disorders — and its impact on employment status.

Conclusion

This study used the Stress Process Model to examine trajectories of depression among single mothers in the context of socio-economic status. Analyses of variations in patterns of stressful events and depression by employment status (employment or SA) revealed that single mothers receiving SA reported a larger number of stressful events specific to housing instability, social isolation, family composition, physical and mental illness, and financial instability than employed single mothers. The prevalence of depressive symptoms in this sample of single mothers was extremely high, with more than 65% of participants reporting symptoms consistent with moderate or severe depression. However, much of the burden of illness fell on participants with the lowest socio-economic status. Fifteen percent of employed parents reported symptoms consistent with severe depression, compared to 67% of SA recipients. Results of multiple regression analysis revealed that 41.5% of the variation in depressive symptoms among single mothers was explained by employment status and stressful events, with employment status contributing most of the variance.

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