Use of Health Services for Psychological Distress Symptoms among Community-Dwelling Older Adults*

Michel Préville,[1,2] Helen-Maria Vasiliadis,[1,2] Richard Boyer,[3,4] Maria Goldfarb,[5] Karine Demers,[6] Joëlle Brassard,[2] Sarah-Gabrielle Béland,[7] and Scientific Committee of the ESA Study

RÉSUMÉ

Cette étude visait à documenter l'utilisation des services de santé pour des symptômes de détresse psychologique dans la population âgée du Québec vivant à domicile. Les données utilisées dans cette étude proviennent d'une étude transversale réalisée en 2005-2006 auprès d'un échantillon représentatif (n = 2784) de la population de 65 ans et plus. Nos résultats ont montré que près de 13 pour cent des répondants rapportaient des symptômes rencontrant les critères diagnostiques de troubles dépressif ou d'anxiété selon le DSM-IV. De plus, 42.4 pour cent de ceux ayant au moins un diagnostic DSM-IV, ont rapporté avoir utilisé les services de santé pour leurs symptômes. La plupart des répondants (79%) ont visité un médecin généraliste. Peu (5%) ont visité un psychologue, un travailleur social (2.4%), ou une infirmière (0.7%). Contrairement aux conclusions d'autres études, nos résultats n'ont montré aucune association significative entre le sexe et l'utilisation des services de santé. En outre, nos résultats ne supportent pas l'hypothèse selon laquelle un faible soutien social augmente la probabilité d'utiliser les services de santé pour des symptômes de détresse psychologique chez les personnes âgées. Cependant, nos résultats suggèrent que les personnes non mariées ont une probabilité plus élevée d'utiliser les services de santé que les personnes âgées mariées. Cette étude a montré également que les personnes âgées présentant un niveau de stress élevé ont rapporté avoir utilisé les services de santé pour leurs symptômes de détresse psychologique dans une plus grande proportion. Nos résultats nous amènent à conclure qu'une grande proportion des besoins de santé mentale des personnes âgées au Québec est potentiellement non comblée. Des recherches longitudinales semblent nécessaires pour éviter une mauvaise interprétation de ces résultats. Les futures études longitudinales permettront de mieux documenter les facteurs reliés à la sous utilisation des services de santé par les personnes présentant un trouble psychiatrique.

ABSTRACT

To document the use of health services for psychological distress symptoms, we collected data from a cross-section of adults aged 65 years and over. Nearly 13 per cent met DSM-IV criteria for mood or anxiety disorders. In addition, 42.4 per cent of those having at least one DSM-IV diagnosis reported having used health services. Results show a direct association between the presence of a probable DSM-IV diagnosis and health service use. However, our results show no significant association between gender and health service use, and do not support the hypothesis that minimal social support increases the probability of older adults using health services for psychological distress. The analysis suggests unmarried elders are more likely than married elders to use health services. Furthermore, this study shows that older adults having a high level of daily hassles reported using health services for psychological distress than those reporting a low stress level. We conclude that a large proportion of elderly mental health needs in Quebec are potentially not being met.

1 Faculty of Medicine, Université de Sherbrooke

2 Research Center, Charles LeMoyne Hospital

3 Faculty of Medicine, Université de Montréal

4 Fernand-Seguin Research Center, Canada

5 Ph.D. candidate, Psychology Department, Université du Québec à Montréal

6 Ph.D. candidate, Clinical Sciences Program, Université de Sherbrooke

7 Ph.D. candidate, Pharmacy Program, Université de Montréal

* This study was supported by the Canadian Institutes of Health Research (200403MOP) and the Fonds de recherche en santé du Québec (ref: 9854). The authors thank the members of the Scientific Committee of the ESA Study, who provided significant scientific advice, and Bernadette Wilson, who provided editing comments.

Manuscript received: / manuscrit reçu : 20/12/07

Manuscript accepted: / manuscrit accepté : 14/11/08

https://doi.org/10.1017/S0714980809090011 Published online by Cambridge University Press

Mots clés : détresse psychologique, besoin de santé, utilisation des services de santé, vieillissment

Keywords: psychological distress, need for health, health services utilization, aging

Address correspondence to
Dr. Michel Préville
Research Center
Hôpital Charles LeMoyne
3120, boul. Taschereau
Greenfield Park (Québec) J4V 2H1
(michel.preville@usherbrooke.ca)

In Quebec, few data are available that report on the needs of the older adult population with regard to health services for mental health problems. The Enquête sur la Santé des Aînés (ESA) study conducted in 2005–2006 showed that in Quebec, nearly 13 per cent of the community-dwelling population aged 65 years and over presented a mood or anxiety disorder according to the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) criteria (Préville, Boyer, Grenier, Dubé, Voyer, Punti, et al., 2008). This represented more than 100,000 people in 2005, a prevalence rate as important as the one observed in the adult population. Although the importance of mental health problems in the older adult population—and the need to improve the accessibility and the quality of mental health services—is recognised, the evaluation of mental health services and the needs of this population has received little attention in Canada. Given the aging population in the next 20 years and the economic burden on the public health sector associated with service use, it becomes essential to provide decision makers with conclusive data on the treatment-seeking behaviour of the elderly population.

The aim of this study was to document the proportion of the older adult population in Quebec that received health services for their psychological distress symptoms as well as the proportion whose needs were potentially not met. In this study, we were also interested in documenting the association between socio-demographic characteristics and the use of health services for psychological distress symptoms in the elderly.

An important number of mood and anxiety disorders are masked in the aged population, according to several researchers (Beekman, Deeg, Braam, Smit, & Van Tilburg, 1997; Lebowitz et al.; O'Connor, Rosewarne, & Bruce, 2001; Simon & Von Korff, 1991; Von Korff, Katon, & Lin, 1990; Wang et al., 2005; Wang, Berglund, Olfson, & Kessler, 2004). Moreover, even though depressed, older adults tend to report their dysphoric mood less frequently than younger adults (Gallo, Anthony, & Muthen, 1994; Klap, Unroe, & Unützer, 2003); instead, they pay more attention to their physical symptoms (Gallo & Rabins, 1999; O'Connor, Rosewarne, & Bruce, 2001; Parashos, Stamouli, Rogakou, Theodotou, Nikas, & Mougias, 2002; Sheehan, Bass, Briggs, & Jacoby, 2003). Several individuals and their families, especially among the current cohort of older adults, view psychological disorders as stigmatizing and, therefore, deny their existence (Gurland & Toner, 1982; Mechanic, Angel, & Davies, 1991; Robb, Haley, Becker, Polivka, & Chwa, 2003; Ruegg, Zisook, & Swerdlow, 1988; Sarkisian, Lee-Henderson, & Mangione, 2003; Shulman, 1989; Zemore & Eames, 1979). Consequently, this view has a negative impact on individuals' intention to consult (Barney, Griffiths, Jorm, & Christensen, 2006), which could have short- and long-term consequences for the health of the elderly (Gallo, Rabins, Lyketsos, Tien, & Anthony, 1997). In addition, this phenomenon also has an impact on health care costs (Greenberg, Kessler, Birnbaum, Leong, Lowe, Berglund, et al., 2003; Schlesinger, Mumford, Glass, & Sharfstein, 1983; Simon & Katzelnick, 1997).

When the elderly do seek consultation for a mental health problem, they more often use the general medical sector (Blazer, 1993; Issakidis & Andrews, 2006; Mickus, Colenda, & Hogan, 2000; Robb, Haley, Becker, Polivka, & Chwa, 2003). Several studies, however, showed that general practitioners do not detect most of their patients' psychiatric problems, particularly mood and anxiety disorders (Crawford, Prince, Menezes, & Mann, 1998; German, Shapiro, & Skinner, 1985; Pfaff & Almeida, 2005; Rapp, Parisi, Walsh, & Wallace, 1988; Volkers, Nuyen, Verhaak, & Schellevis, 2004; Waxman, Carner, & Klein, 1984). One explanation is that physicians tend to normalize depressive and anxiety symptoms reported by their elderly patients (Gallo, Ryan, & Ford, 1999; Mackenzie, Gekoski, & Knox, 1999; Zylstra & Steitz, 2000) and, as a result, do not refer patients to mental health services (Crawford et al., 1998; Gallo et al., 1999).

In studying the service use among individuals presenting psychological distress symptoms, studies found that diagnosis alone was a poor predictor of health services use (Leaf, Bruce, Tischler, Freeman, Weissman, & Myers, 1988; Mechanic, Angel, & Davis, 1991; Zola, 1966). Some studies reported that women sought treatment for emotional problems more than men did (Crabb & Hunsley, 2006; Robins, Locke, & Regier,

https://doi.org/10.1017/S0714980809090011 Published online by Cambridge University Press

1991; Smith, McGovern, & Peck, 2004; Swartz, Wagner, Swanson, Burns, George, & Padgett, 1998). This association could in part be explained by the fact that women exhibit mood and anxiety disorders more often than men (Henderson, Andrews, & Hall, 2000; Kessler, Berglund, Demler, Jin, Merikangas, & Walters, 2005). Researchers have also reported that age is associated with health service use for mental health problems, adults receiving treatment more often than young and older adults (Alonso, Angermeyer, Bernert, Bruffaerts, Brugha, Bryson, et al., 2004; Crabb & Hunsley, 2006; Robb et al., 2003; Robins et al., 1991; Smith et al., 2004; Swartz et al., 1998; Wetherell, Kaplan, Kallenberg, Dresselhaus, Sieber, & Lang, 2004). Other researchers also found an association between education and the use of general medical services for mental health problems, suggesting that educated people report fewer psychological distress symptoms and that they do use specialized health services for their psychological problems (Robins et al., 1991; Swartz et al., 1998; Ten Have, Oldehinkel, Vollebergh, & Ormel, 2003; Veroff, Kulka, & Douvan, 1981). Finally, other studies suggested that in a context where health services are accessible to all (as in Quebec), low-income groups do not use health services for their mental health problems more often than those with higher incomes (Préville, Potvin, & Boyer, 1998; Wang et al., 2005).

Furthermore, it has been shown that separated or divorced people and those living alone or with little social support, consult more often for psychological distress symptoms (Crabb & Hunsley, 2006; Leaf et al., 1988; Ten Have, Vollebergh, Bijl, & Ormel, 2002; Tischler, Henisz, Myers, & Boswell, 1975a, 1975b; Wang et al., 2005). In addition, the presence of stressful life events involving physical, social, or economic losses could be more frequent among the elderly using health services for their mental health problems (Phillips & Murrell, 1994). Living in a rural area could also have negative consequences on individuals' access to health services for mental health problems (Issakidis & Andrews, 2006; Wang et al., 2005).

Method

Data used in this study came from a cross-sectional survey, the Enquête sur la Santé des Aînés (ESA) study, conducted in 2005–2006. In that study, researchers used a probabilistic sample (n = 2,811) of French-speaking community-dwelling older adults (94% of the Quebec population speaks French) to document the prevalence of moderate or severe psychological distress episodes in the older adult population and their use of health services for their symptoms. Subjects living in Quebec's northern regions were excluded on feasibility grounds; in 2005, 10 per cent of the elderly population resided in these regions.

We used a random-dialling method to develop the study's sampling frame, which included stratification according to three geographical areas—(1) metropolitan, (2) urban, and (3) rural—to take into account regional variations in the Quebec health service system. In each geographical area, we derived a proportional sample of households on the basis of Quebec's 16 administrative regions. We also used a random-sampling method to select only one older adult (65 years or over) within the household. The response rate for this study was 66.5 per cent.

Procedure

We collected data as follows. First, a health professional contacted potential respondents by phone to describe the study's objectives and length, answer questions, and ask them to participate in an in-home interview. Next, we sent a letter describing the study to reassure the potential participants about the credibility of the investigation and of the interviewer. Appointments were then made with those who volunteered. The interviewers were health professionals (n = 20), staff members of a national polling firm. In preparation for the interviews, they were given two days' training by the principal investigator on administering the ESA computer-assisted questionnaires. Respondents were offered CAN$15 compensation for their participation.

The in-home interviews, which lasted 90 minutes on average, took place within two weeks of initial contact. Written consent to conduct the interview was obtained at the beginning of the interview from all volunteers. Because memory problems affect the accuracy of the information given and performance on psychological questionnaires (Burke, Houston, Boust, & Roccafortte, 1989; Kafonek, Ettinger, Roca, Kittner, Taylor, & German, 1989), interviewers excluded those individuals presenting severe or moderate cognitive problems on the basis of the Mini-Mental State Examination (a score < 22) (Crum, Anthony, Bassett, & Folstein, 1993; Folstein, Folstein, & McHugh, 1975) (n = 27) at the interview's start. Thereafter, subjects presenting no moderate or severe cognitive problems (n = 2,784) were invited to respond to the ESA questionnaires (Table 1). The research procedure was previously reviewed and authorized by the Sherbrooke Geriatric University Institute Ethics Committee.

Measures

We measured the respondent's mental health status by means of a computer-assisted questionnaire: the ESA Diagnostic Questionnaire (ESA-Q), which was developed by the research team, based on DSM-IV criteria (APA, 1994). The ESA-Q is similar to the Diagnostic Interview Schedule (DIS) and the Composite International Diagnostic Interview (CIDI), which demonstrated

https://doi.org/10.1017/S0714980809090011 Published online by Cambridge University Press

Table 1: Respondents' socio-demographic and mental health characteristics

	Sample (*n* = 2784)		
	n	**%**	**CI95%**
Age			
65–74 years	1619	58.2	56.2–59.8
75 years and over	1165	41.8	40.1–43.8
Gender			
Male	1138	40.9	39.2–42.8
Female	1646	59.1	57.1–60.8
Marital status			
Married	1280	46.0	43.9–47.6
Separated/divorced/ widowed/single	1493	54.0	51.9–55.6
Missing	11	—	—
Income			
< 15 000 $	474	18.7	17.3–20.3
≥15 000 $	2062	81.3	79.6–82.7
Missing	248	—	—
Education			
0–7 years	651	23.5	21.9–25.0
8 years and over	2125	76.5	74.9–78.1
Missing	8	—	—
Region			
Metropolitan	1242	44.6	42.8–46.5
Urban	466	16.7	15.4–18.1
Rural	1076	38.7	36.7–40.5
Daily hassles stress index			
< 2	1130	40.6	38.9–42.6
≥ 2	1654	59.4	57.4–61.0
Social support			
0, 1, 2 sources	413	15.8	13.7–16.3
Three sources	2341	84.2	83.7–86.3
Missing	30	—	—
Presence of a probable DSM-IV mood or anxiety disorder			
None	2425	87.1	86.1–88.6
One disorder	294	10.6	9.3–11.6
Two or more	65	2.3	1.8–2.9
	Mean	(SE)	CI95%
Number of chronic diseases	3.26	0.04	3.18–3.34

satisfactory reliability and validity (Bucholz, Marion, Shayka, Marcus, & Robins, 1996; Clayer, McFarlane, & Wright, 1992; Erdman, Klein, Greist, Skare, Husted, Robins, et al., 1992; Levitan, Blouin, Navarro, & Hill, 1991; Murphy, Monson, Laird, Sobol, & Leighton, 2000; Robins, Helzer, Croughan, & Ratcliff, 1981; Robins, Helzer, Orvaschel, Anthony, Blazer, Burnami, et al., 1985; Wittchen, Robins, Cottler, Sartorius, Burke, & Regier, 1991). The complete definition of the disorders studied in the ESA survey has been reported previously (Préville et al., 2008). For our analysis, we included the following psychiatric disorders: major depression, minor depression, mania, specific phobia, social phobia, agoraphobia, panic disorder, obsessive-compulsive disorder, and generalized anxiety disorder.

The respondents' use of health services for their psychological distress symptoms was measured at the end of each ESA diagnosis module with the following questions: (1) "During the past 12 months, did you consult a general practitioner or another health professional about the symptoms you just reported?" (2) "Who did you consult the first time about these symptoms (family doctor, other general practitioner, specialist, psychologist, social worker, nurse, other)?" (3) "Have you been referred to other health professionals for these symptoms (Yes/No)?" (4) "Did you receive a drug prescription for these symptoms (Yes/No)?" (5) "Did you have your prescription filled up (Yes/No)?", and (6) "Did you stop your drug treatment (Yes/No)?".

The social support measure we applied in this study is an index based on the responses to three questions: (1) "In your environment, is there someone you can confide in or talk to freely about your problems?"; (2) "Is there someone in your family or circle of friends who could assist you in time of need?"; and (3) "Is there someone you feel close to, a family member or friend, who shows affection towards you?". Because the majority of the respondents had three sources of support, we defined two categories: (1) absence of at least one of these sources of social support, and (2) presence of the three sources of social support measured. Other studies showed that this index of perceived social support is significantly correlated with respondents' psychological distress status, physical health status, and psychotropic drug use (Préville, Hébert, Boyer, & Bravo, 2001; Préville, Hébert, Bravo, & Boyer, 2001).

To measure the presence of stressful life events, we used the DHS-30 items version adapted in French for the elderly from the Daily Hassles Scale (Kanner, Coyne, Schaefer, & Lazarus, 1981; Vézina & Giroux, 1988). The DHS-30 items questionnaire refers to hassles in different areas of life, such as family, work, health, friends, and so on. Subjects are asked to score the severity of each hassle that has occurred in the last month on a 5-point scale ranging from 1 (not at all severe) to 5 (extremely severe). We calculated an index of stress by dividing the sum of the severity scores on the 30 items by the total number of items reported. The daily hassles stress index varies from 0 to 5 and was dichotomized as follows: (1) low level (< 2, the median score) of stress experienced during the last month; (2) high level (≥ 2) of stress experienced during the last month. The validity study of this index showed that indicators of stress related to physical health contribute significantly to the score on this index in the elderly population (DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982; Kanner et al., 1981; Monroe, 1983; Weinberger, Hiner, & Tierney, 1987).

https://doi.org/10.1017/S0714980809090011 Published online by Cambridge University Press

To determine the respondents' physical health status, we measured the number of chronic health problems they reported according to the International Classification of Diseases (ICD-10). The socio-demographic characteristics we examined in this study were as follows: (1) age, (2) gender, (3) marital status, (4) education, (5) income, and (6) region of residence. Level of education was categorized as (1) less than 7 years, or (2) 8 years and over. The family annual income was measured as (1) less than $15,000, or (2) $15,000 and over. The region of residence was categorized based on population density criteria as (1) metropolitan (≥ 100 000 h.), or (2) urban (≥1,000 h.) and rural (< 1,000 h.), according to the definitions of the Institut de la Statistique du Québec (Institut de la Statistique du Québec, 2005).

Analyses

Data were weighted to ensure that the analysis reflected the true proportions of older adults in each region and each geographical area. Weights were determined based on (1) the probability of selection of the administrative region in the geographic area [π(a)]; (2) the conditional probability of selection of the household in the administrative region [π(b/a)]; and (3) the conditional probability of selection of the subject in the household [π(c/ab)]. The weight (w) attributed to each subject represented the inverse of its probability of selection {1/[π(abc)]}. The weighted sample included 2,784 older adults living at home. The mean and median sampling design effects were 0.94 and 0.95 respectively.

We applied a logistic regression analysis to describe the associations between the independent variables we studied and the respondents' use of health services for psychological distress symptoms (Hosmer & Lemeshow, 1989). As a measure of association, we used the odds ratio and its confidence interval. All hypotheses were tested at the 5 per cent significance level.

Results

Based on the weighted sample, the respondents' mean age was 73.8 years (SD = 6.1), and 59 per cent of the respondents were women. Among the socio-demographic factors studied, 46.0 per cent of respondents were married; 84.2 per cent reported all three sources of social support; 18.7 per cent reported an annual income lower than $15,000; 23.5 per cent of respondents had fewer than 8 years of education, and 44.6 per cent resided in a metropolitan area. Finally, 59.4 per cent of respondents reported a high level of daily hassles during the last month, and 12.9 per cent reported psychological distress symptoms that met criteria for a DSM-IV diagnosis.

As Figure 1 indicates, 12.8 per cent (n = 355) of respondents used health services for psychological distress symptoms during the 12-month period preceding the ESA study. This represents 35.3 per cent of the respondents who reported at least one psychological distress symptom and 42.4 per cent of the respondents having a probable DSM-IV diagnosis. When we restricted the analysis to the data specifically related to the use of health services for psychological distress symptoms (n = 966), our results indicate that the use of health services did not vary significantly according to age, gender, income, and education when the level of psychological distress symptoms was statistically controlled (see Table 2). The results, however, do indicate that older adults living in an urban and rural area were more likely to seek consultation as opposed to those living in metropolitan areas (OR: 1.39; CI: 1.02-1.90), as did respondents living alone (widowed, separated, divorced, or single) (OR: 1.58; CI: 1.14-2.18) compared to those who were married. The results of this study also indicate that the use of health services was lower among those reporting minimal social support (OR: 0.64; CI: 0.43-0.95). In addition, the respondents reporting a high level of daily hassles during the previous month (OR: 1.99; CI: 1.42-2.80) and those having a probable psychiatric disorder according to the DSM-IV (OR: 1.50; CI: 1.11-2.03) were more likely to have consulted for their symptoms in the previous 12 months.

Among the respondents (n = 341) who reported having used health services for their psychological distress symptoms, 93 per cent consulted a physician for their symptoms. A large majority (79.0%) consulted a general practitioner; a few reported having consulted a psychologist (5.0%), social worker (2.4%), or nurse (0.7%) (see Figure 2a).

Among the respondents who consulted a general practitioner (n = 270), most were referred to a specialist (49.1%) or psychiatrist (13.1%); 19.4 per cent were

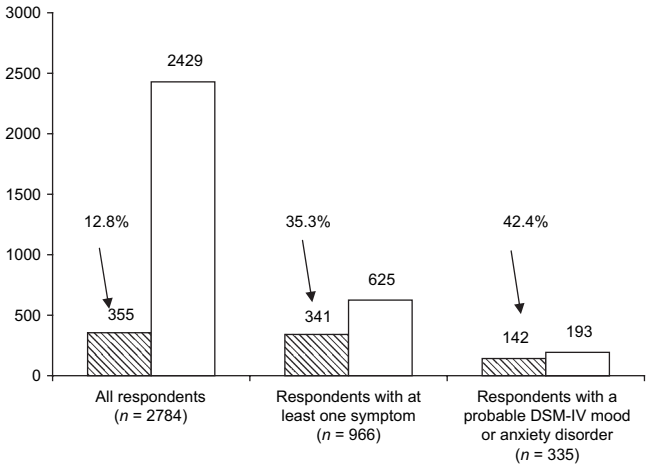

Figure 1: Respondents' use of health services for specific categories of respondents

https://doi.org/10.1017/S0714980809090011 Published online by Cambridge University Press

Table 2: Use of health services for psychological distress symptoms according to respondents' socio-demographic and health characteristics

	Sample (*n* = 966)							
	Use of health services within the previous 12 months							
	Yes		**No**					
	n	**%**	***n***	**%**	**OR**	**CI95%**	**OR****	**CI95%**
Age								
65–74 years	203	59.5	386	61.8	*		*	
75 years and over	138	40.5	239	38.2	1.10	0.84–1.44	1.05	0.77–1.43
Gender								
Male	107	31.4	213	34.1	*		*	
Female	234	68.6	412	65.9	1.12	0.85–1.49	0.98	0.72–1.34
Marital status								
Married	129	38.3	276	44.2	*		*	
Separated/divorced/ widowed/single	208	61.7	348	55.8	1.28	0.97–1.68	1.58	1.14–2.18
Income								
< $15,000	66	20.6	121	20.8	0.98	0.70–1.38	0.77	0.52–1.14
≥ $15,000	254	79.4	460	79.2	*		*	
Missing	65	—	—	—				
Education								
0–7 years	121	35.3	229	36.6	0.95	0.72–1.24	0.72	0.50–1.01
8 years and more	221	64.7	395	63.3	*		*	
Region								
Metropolitan	153	44.9	327	52.3	*		*	
Urban/Rural	188	55.1	298	47.7	1.35	1.04–1.75	1.39	1.02–1.90
Daily hassles stress index								
Low level of stress (< 2)	72	21.1	224	35.8	*		*	
High level of stress (≥ 2)	269	78.9	401	64.2	2.09	1.54–2.84	1.99	1.42–2.80
Social support								
0, 1, 2 sources of support	45	13.4	124	20.1	0.94	0.71–1.24	0.64	0.43–0.95
Three sources of support	290	86.6	494	79.9	*		*	
Missing	13	—	—	—				
Presence of a DSM-IV mood or anxiety disorder								
Yes	140	40.9	189	30.3	2.08	1.19–3.64	1.50	1.11–2.03
No	202	59.1	435	69.7	*		*	
	Mean	(SE)	Mean	(SE)	OR	CI95%	OR**	CI95%
Number of chronic diseases	4.22	0.11	3.46	0.08	1.17	1.10–1.25	1.16	1.09–1.25

*** Indicate the reference category for calculating the odd ratio**
**** Adjusted odds ratio**

referred to a psychologist, 5.9 per cent were referred to another general practitioner, and 7.0 per cent were referred to a social worker or nurse (3.3%) (see Figure 2b). Among the respondents reporting at least one psychological distress symptom but not meeting the DSM-IV diagnosis threshold, 30.6 per cent reported having had consulted a physician for their symptoms in the past year (see Figure 3). Nearly 61 per cent of those who visited a physician received a prescription for their symptoms, and 53.4 per cent were referred to another health professional. Among the respondents with a probable DSM-IV disorder, 5.1 per cent first consulted with a non-physician health professional. Among respondents with a probable DSM-IV disorder, 37.3 per cent consulted a physician and 66.4 per cent of those received a prescription for the symptoms they experienced; 38.4 per cent were referred to another health professional (see Figure 3). With regard to medication use, almost all (98.9%) of respondents had their prescriptions filled, but about 14 per cent reported having subsequently stopped their treatment.

Discussion

The aim of this study was to document the use of health services for psychological distress symptoms in the

https://doi.org/10.1017/S0714980809090011 Published online by Cambridge University Press

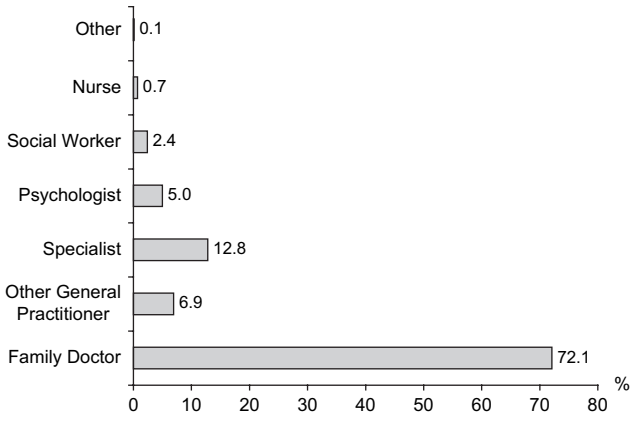

Figure 2a: Type of professional visited by the respondents reporting to have used health services for psychological distress symptoms (*n* = 342)

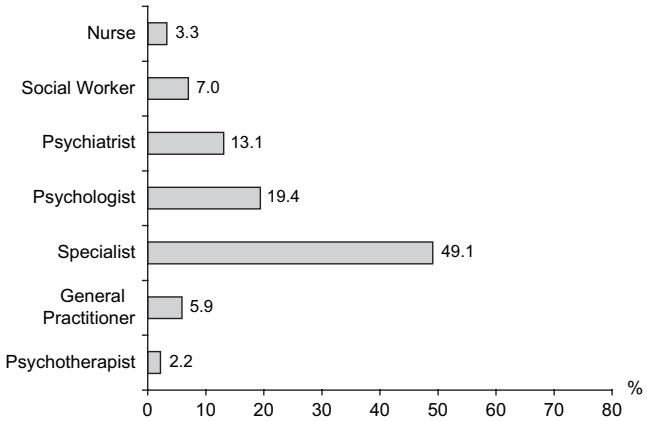

Figure 2b: Type of professional referred to by the general practitioner first consulted (*n* = 146)

community-dwelling elderly population in Quebec. Our results indicate that 34.7 per cent (n = 966) of respondents reported at least one psychological distress symptom. Among them, 34.7 per cent met the DSM-IV criteria for a mood or anxiety disorder. In addition, 35.3 per cent of those having at least one symptom reported having used health services for the symptoms they experienced, and 42.4 per cent of those having symptoms meeting DSM-IV criteria reported having used health services for their symptoms. This result is similar to the proportion of users reported in other surveys using samples of the general population who were 18 years and older (Lefebvre, Lesage, Cyr, Toupin, & Fournier, 1998; Wang et al., 2005). Of the respondents who consulted, most (72.1%) visited their family doctor, and a few were referred to a non-medical health professional. Our findings are similar to those reported in other epidemiological surveys (Crabb & Hunsley, 2006; Klap et al., 2003; Mickus et al., 2000; Phillips & Murrell, 1994; Robb et al., 2003).

Our results show that the elderly with a probable psychiatric disorder are more likely to contact the health care system for their symptoms than sub-clinical cases. When the number of psychological distress symptoms was controlled, the analysis suggested that unmarried people are more likely to use services than those who are married. These results are in agreement with the Canadian Community Health Survey results (Crabb & Hunsley, 2006), in which a person's not being married significantly predicted mental health consultations with a family physician. In addition, the results support the hypothesis that a high level of social support increases the probability of using health services for psychological distress symptoms among the elderly and suggest that supporting social network would facilitate services use by providing assistance and information (Vasiliadis, Tempier, Lesage, & Kates, *in press).* These results are congruent with the idea that mental health services utilization is influenced not only by symptoms but also by psychological and social variables.

The data also show that a high level of daily hassles significantly increases the probability of consulting for psychological distress symptoms among the elderly. This result is in agreement with the study by Phillips and Murrell (1994), who found that stressful life events occurred more frequently among the elderly who sought health services for their mental health problems.

Contrary to findings from other studies, our results do not show an association between gender and health service use for psychological distress symptoms, and thus do not support the gender differential hypothesis of health services use for psychological distress symptoms suggested by other researchers (Alonso et al., 2004; Crabb & Hunsley, 2006; Smith et al., 2004). Furthermore, income levels of the elderly in this study were not associated with health service use for psychological distress symptoms. The results we obtained are consistent with findings reported by Bland, Newman, and Orn (1997) and also with the hypothesis that individuals from lower social classes have a more functional definition of their health: they tend not to consult health services when their psychological distress symptoms do not interfere with the performance of their social roles (Holzer, Shea, Swanson, Leaf, Myers, George, et al., 1986; Wells, Manning, Duan, Newhouse, & Ware, 1986). Finally, as the study by Bland and colleagues (1997) and Klap and colleagues (2003) showed, we found no evidence that education acts as a predisposing factor of health services use for psychological distress symptoms.

Our interpretation of the results should be balanced against some of the study's limitations. First, the study

https://doi.org/10.1017/S0714980809090011 Published online by Cambridge University Press

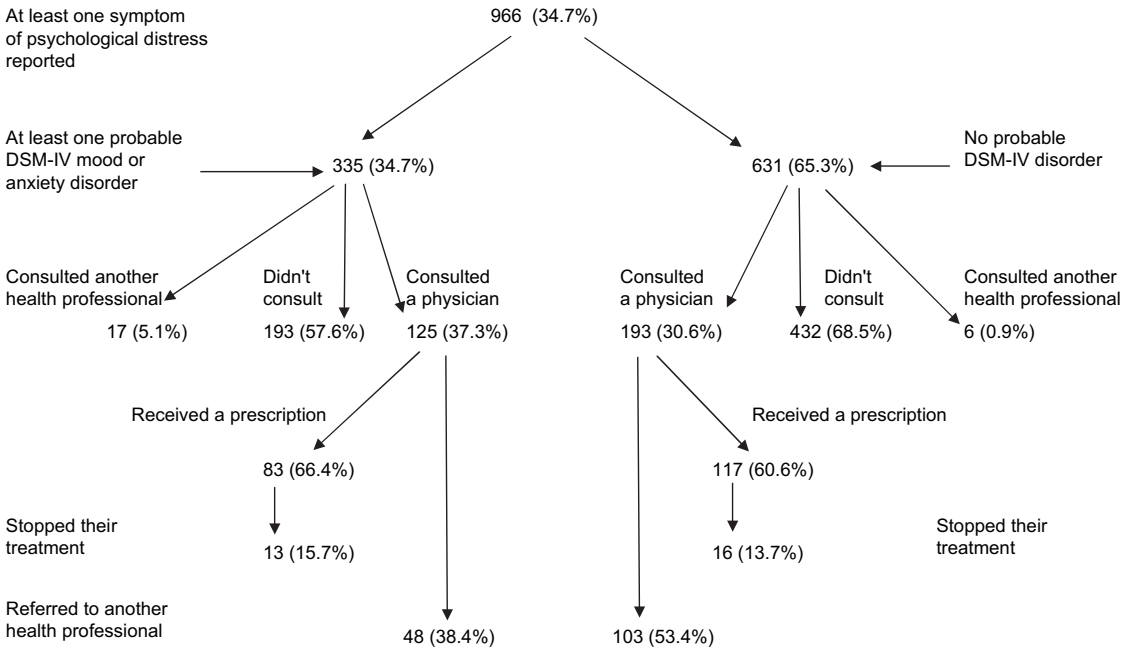

Figure 3: Proportion of respondents who used health services for psychological distress symptoms in the previous 12 months

was cross-sectional; therefore, we were unable to determine the direction of the relationships between predisposing and facilitating factors and use of health services for psychological distress symptoms. Second, the data used were self-reported and may include an information bias related to the respondents' attitudes at the time of the survey. Despite these limitations, our analyses were conducted on a representative sample of Quebec's older-adult general population. Also, our data allowed us to study health service use reported specifically for psychological distress symptoms, contrary to other studies that generally document the association between health services use and psychological distress symptoms but without controlling for the reason each specific health services visit was made (Alonso et al., 2004; Issakidis & Andrews, 2006; Phillips & Murrell, 1994; Smith et al., 2004; Wang et al., 2005). This might explain why, in our study, we did not find an association between gender and the use of health services for psychological distress symptoms.

Conclusion

Our results show that 57 per cent of probable DSM-IV active cases at the time of the ESA study did not consult for their symptoms during the previous 12-month period. This result leads us to conclude that a large proportion of elderly mental health needs in Quebec are potentially not being met. However, longitudinal research on the persistence and remission of the elderly population's psychological distress symptoms appears to be necessary in order that researchers avoid misinterpreting findings on unmet needs. Further studies based on incident cases might also contribute to our understanding of individual, environmental, and organisational factors related to non-use of health services among individuals with a probable psychiatric disorder.

The ESA study showed that 37 per cent of the elderly with a probable DSM-IV disorder consulted a physician for their symptoms. Further studies should focus on the performance of the health care system to respond to the needs of the elderly. Patient-based studies focusing on the quality of the mental health services offered in the Quebec primary health care sector are needed, and will help decision makers in their future revision of the Quebec mental health plan that was implemented in 2005.

References

Alonso, J., Angermeyer, M.C., Bernert, S., Bruffaerts, R., Brugha, T.S., Bryson, H., et al. (2004). Use of mental health services in Europe: Results from the European study of the epidemiology of mental disorders (ESEMeD) project. *Acta Psychiatrica Scandinavica*, *109*, *Supplementum (420)*, 47–54.

American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders* (4th ed., DSM-IV). Washington, DC: APA.

Barney, L.J., Griffiths, K.M., Jorm, A.F., & Christensen, H. (2006). Stigma about depression and its impact on help-seeking intentions. *Australian and New Zealand Journal of Psychiatry*, *40*(1), 51–54.

https://doi.org/10.1017/S0714980809090011 Published online by Cambridge University Press

Beekman, A.T., Deeg, D.J., Braam, A.W., Smit, J.H., & Van Tilburg, W. (1997). Consequences of major and minor depression in later life: A study of disability, well-being and service utilization. *Psychological Medicine*, *27*(6), 1397–1409.

Bland, R.C., Newman, S.C., & Orn, H. (1997). Help-seeking for psychiatric disorders. *Canadian Journal of Psychiatry*, *42*(7), 935–942.

Blazer, D.G. (1993). *Depression in late life* (2nd ed.). St. Louis: Mosby.

Bucholz, K.K., Marion, S.L., Shayka, J.J., Marcus, S.C., & Robins, L.N. (1996). A short computer interview for obtaining psychiatric diagnoses. *Psychiatric Services*, *47*(3), 293–297.

Burke, W.J., Houston, M.J., Boust, S.J., & Roccafortte, W.H. (1989). Use of the Geriatric Depression Scale in dementia of the Alzheimer type. *Journal of the American Geriatrics Society*, *37*(9), 856–860.

Clayer, J.R., McFarlane, A.C., & Wright, G. (1992). Epidemiology by computer. *Social Psychiatry and Psychiatric Epidemiology*, *27*(6), 258–262.

Crabb, R., & Hunsley, J. (2006). Utilisation of mental health services among older adults with depression. *Journal of Clinical Psychology*, *62*(3), 299–312.

Crawford, M.J., Prince, M., Menezes, P., & Mann, A.H. (1998). The recognition and treatment of depression in older people in primary care. *International Journal of Geriatric Psychiatry*, *13*(3), 172–176.

Crum, R.M., Anthony, J.C., Bassett, S.S., & Folstein, M.F. (1993). Population-based norms for the mini-mental state examination by age and educational level, *Journal of American Medical Association*, *269*(18), 2386–2391.

DeLongis, A., Coyne, J.C., Dakof, G., Folkman, S., & Lazarus, R.S. (1982). Relationship of daily hassles, uplifts, and major life events to health status. *Health Psychology*, *1*(2), 119–136.

Erdman, H.P., Klein, M.H., Greist, J.H., Skare, S.S., Husted, J.J., Robins, L.N., et al. (1992). A comparison of two computer-administered versions of the NIMH Diagnostic Interview Schedule. *Journal of Psychiatric Research*, *26*(1), 85–95.

Folstein, M.F., Folstein, S.E., & McHugh, P.R. (1975). Mini-Mental State: A practical method for grading the state of patients for the clinician. *Journal of Psychiatric Research*, *12*(3), 189–198.

Gallo, J.J., Anthony, J., & Muthen, B. (1994). Age differences in the symptoms of depression: A latent trait analysis. *Journal of Gerontology*, *49*(6), 251–264.

Gallo, J.J., & Rabins, P.V. (1999). Depression without sadness: Alternative presentations of depression in late life. *American Family Physician*, *60*(3), 820–826.

Gallo, J.J, Rabins, P.V., Lyketsos, C.G., Tien, A.Y., & Anthony, J.C. (1997). Depression without sadness: Functional outcomes of nondysphoric depression in later life. *Journal of American Geriatric Society*, *45*(5), 570–578.

Gallo, J.J., Ryan, S.D., & Ford, D.E. (1999). Attitudes, knowledge, and behavior of family physicians regarding depression in late life. *Archives of Family Medicine*, *8*(3), 249–256.

German, P.S., Shapiro, S., & Skinner, E.A. (1985). Mental health of the elderly: Use of health and mental health services. *Journal of American Geriatric Society*, *33*(4), 246–252.

Greenberg, P.E., Kessler, R.C., Birnbaum, H.G., Leong, S.A., Lowe, S.W., Berglund, P.A., et al., (2003). The economic burden of depression in the United States: How did it change between 1990 and 2000? *Journal of Clinical Psychiatry*, *64*(12), 1465–1475.

Gurland, B.J., & Toner, J.A. (1982). Depression in the elderly: A review of recently published studies. In C. Eisdorfer (Ed.), *Annual Review of Gerontology and Geriatrics* (pp. 228–265). New York: Springer.

Henderson, S., Andrews, G., & Hall, W. (2000). Australia's mental health: An overview of the general population survey. *Australian and New Zealand Journal of Psychiatry*, *34*(2), 197–205.

Holzer, C.E., Shea, B.M., Swanson, J.W., Leaf, P.J., Myers, J.K., George, L., et al., (1986). The increased risk for specific psychiatric disorders among persons of low socioeconomic status: Evidence from the Epidemiologic Catchment Area Surveys. *American Journal of Social Psychiatry*, *4*, 259–271.

Hosmer, D.W., & Lemeshow, S. (1989). *Applied logistic regression*. New York: Wiley & Sons.

Institut de la Statistique du Québec. (2005). Lexique du système du code géographique du Québec [Glossary of the system of geographical code in Quebec].

Issakidis, C., & Andrews, G. (2006). Who treats whom? An application of the pathways to care model in Australia. *Australian and New Zealand Journal of Psychiatry*, *40*(1), 74–86.

Kafonek, S., Ettinger, W.H., Roca, R., Kittner, S., Taylor, N., & German, P.S. (1989). Instruments for screening for depression and dementia in a long-term facility. *Journal of the American Geriatrics Society*, *37*(1), 29–34.

Kanner, A.D., Coyne, J.C., Schaefer, C., & Lazarus, R.S. (1981). Comparison of two modes of stress measurement: Daily hassles and uplifts versus major life events. *Journal of Behavioral Medicine*, *4*(1), 1–39.

Kessler, R.C., Berglund, P., Demler, O., Jin, R., Merikangas, K.R., & Walters, E.E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the national comorbidity survey replication. *Archives of General Psychiatry*, *62*(6), 593–602.

Klap, R., Unroe, K.T., & Unützer, J. (2003). Caring for mental illness in the United States: A focus on older adults. *American Journal of Geriatric Psychiatry*, *11*(5), 517–524.

Leaf, P.J., Bruce, M.L., Tischler, G.L., Freeman, D.H.Jr., Weissman, M.M., & Myers, J.K. (1988). Factors affecting the utilization of specialty and general medical mental health services. *Medical Care*, *26*(1), 9–26.

https://doi.org/10.1017/S0714980809090011 Published online by Cambridge University Press

Lebowitz, B.D., Pearson, J.L., Schneider, L.S., Reynolds, C.F. 3rd, Alexopoulos, G.S., Brace, M.L., et al. (1997). Diagnosis and treatment of depression in late life. Consensus statement update. *Journal of American Medical Association*, *278* (14), 1186–1190.

Lefebvre, J., Lesage, A., Cyr, M., Toupin, J., & Fournier, L. (1998). Factors related to utilization of services for mental health reasons in Montreal, Canada. *Society of Psychiatry and Psychiatric Epidemiology*, *33*(6), 291–298.

Levitan, R.D., Blouin, A.G., Navarro, J.R., & Hill, J. (1991). Validity of the computerized DIS for diagnosing psychiatric inpatients. *Canadian Journal of Psychiatry*, *36*(10), 728–731.

Mackenzie, C.S., Gekoski, W.L., & Knox, V.J. (1999). Do family physicians treat older patients with mental disorders differently from younger patients? *Canadian Family Physician*, *45*, 1219–1224.

Mechanic, D., Angel, R., & Davies, L. (1991). Risk and selection processes between the general and the specialty mental health sectors. *Journal of Health & Social Behavior*, *32*(1), 49–64.

Mickus, M., Colenda, C.C., & Hogan, A.J. (2000). Knowledge of mental health benefits and preferences for type of mental health providers among the general public. *Psychiatric Services*, *51*(2), 199–202.

Monroe, S.M. (1983). Social support and disorder: Toward an untangling of cause and effect. *American Journal of Community Psychology*, *11*(1), 81–97.

Murphy, J.M., Monson, R.R., Laird, N.M., Sobol, A.M., & Leighton, A.H. (2000). A comparison of diagnostic interviews for depression in the Stirling County Study: Challenges for psychiatric epidemiology. *Archives of General Psychiatry*, *57*(3), 230–236.

O'Connor, D.W., Rosewarne, R., & Bruce, A. (2001). Depression in primary care. 1: Elderly patients' disclosure of depressive symptoms to their doctors. *International Psychogeriatrics*, *13*(3), 359–365.

Parashos, I.A., Stamouli, S., Rogakou, E., Theodotou, R., Nikas, I., & Mougias, A. (2002). Recognition of depressive symptoms in the elderly: What can help the patient and the doctor. *Depression & Anxiety*, *15*(3), 111–116.

Pfaff, J.J., & Almeida, O.P. (2005). A cross-sectional analysis of factors that influence the detection of depression in older primary care patients. *Australian and New Zealand Journal of Psychiatry*, *39*(4), 262–265.

Phillips, M.A., & Murrell, S.A. (1994). Impact of psychological and physical health, stressful events, and social support on subsequent mental health help seeking among older adults. *Journal of Consulting and Clinical Psychology*, *62*(2), 270–275.

Préville, M., Boyer, R., Grenier, S., Dubé, M., Voyer, P., Punti, R., et al., & the Scientific Committee of the ESA study. (2008). The epidemiology of psychiatric disorders in the Quebec's older adult population. *Canadian Journal of Psychiatry*, *53*(12), 822–832.

Préville, M., Hébert, R., Boyer, R., & Bravo, G. (2001). Correlates of psychotropic drug use in the elderly compared to adults aged 18-64: Results from the Quebec Health Survey. *Aging and Mental Health*, *5*(3), 216–224.

Préville, M., Hébert, R., Bravo, G., & Boyer, R. (2001). Predisposing and facilitating factors of severe psychological distress among frail elderly adults. *Canadian Journal on Aging*, *21*(2), 195–204.

Préville, M., Potvin, L., & Boyer, R. (1998). Psychological distress and use of ambulatory medical services in the Quebec medicare system. *Health Services Research*, *33*(2), 249–260.

Rapp, S.R., Parisi, S.A., Walsh, D.A., & Wallace, C.E. (1988). Detecting depression in elderly medical inpatients. *Journal of Consulting and Clinical Psychology*, *56*(4), 509–513.

Robb, C., Haley, W.E., Becker, M.A., Polivka, L.A., & Chwa, H.J. (2003). Attitudes towards mental health care in younger and older adults: Similarities and differences. *Aging & Mental Health*, *7*(2), 142–152.

Robins, L.N., Helzer, J.E., Croughan, J., & Ratcliff, K.S. (1981). National Institute of Mental Health Diagnostic Interview Schedule. Its history, characteristics, and validity. *Archives of General Psychiatry*, *38*(4), 381–389.

Robins, L.N., Helzer, J.E., Orvaschel, H., Anthony, J.C., Blazer, D.G., Burnami, A., et al., (1985). The Diagnostic Interview Schedule. In W.W. Eaton & L.G. Kessler (Eds.), *Epidemiologic field methods in psychiatry* (pp. 143–170). New York: Academic Press.

Robins, L.N., Locke, B.Z., & Regier, D.A. (1991). An overview of psychiatric disorders in America. In L.N. Robins, & D.A. Regier (Eds.), *Psychiatric Disorders in America* (pp. 328–366). New York: Free Press.

Ruegg, R.G., Zisook, S., & Swerdlow, N.R. (1988). Depression in the aged. *Psychiatric Clinics of North America*, *11*(1), 83–99.

Sarkisian, C.A., Lee-Henderson, M.H., & Mangione, C.M. (2003). Do depressed older adults who attribute depression to "old age" believe it is important to seek care? *Journal of General Internal Medicine*, *18*(12), 1001–1005.

Schlesinger, H.J., Mumford, E., Glass, G.V., & Sharfstein, S. (1983). Mental health treatment and medical care utilization in a free-for-service system: Outpatient mental health treatment following the onset of a chronic disease. *American Journal of Public Health*, *73*(4), 422–429.

Sheehan, B., Bass, C., Briggs, R., & Jacoby, R. (2003). Somatic symptoms among older depressed primary care patients. *International Journal of Geriatric Psychiatry*, *18*(6), 547–548.

https://doi.org/10.1017/S0714980809090011 Published online by Cambridge University Press

Shulman, K.I. (1989). Conceptual problems in the assessment of depression in old age. *Psychiatry Journal University of Ottawa*, *14*(2), 364–366.

Simon, G.E., & Von Korff, M. (1991). Somatization and Psychiatric Disorder in the NIMH Epidemiologic Catchment Area Study. *American Journal of Psychiatry*, *148*(11), 1494–1500.

Simon, G.E., & Katzelnick, D.J. (1997). Depression, use of medical services and cost-offset effects. *Journal of Psychosomatic Research*, *42*(4), 333–344.

Smith, L.D., McGovern, R.J., & Peck, P.L. (2004). Factors contributing to the utilization of mental health services in a rural setting. *Psychological Reports*, *95*(2), 435–442.

Swartz, M.S., Wagner, H.R., Swanson, J.W., Burns, B.J., George, L.K., & Padgett, D.K. (1998). Administrative update: Utilization of services. I. Comparing use of public and private mental health services: The enduring barriers of race and age. *Community Mental Health Journal*, *34*(2), 133–144.

Ten Have, M.T., Oldehinkel, A., Vollebergh, W., & Ormel, J. (2003). Does educational background explain inequalities in care service use for mental health problems in the Dutch general population? *Acta Psychiatrica Scandinavica*, *107*(3), 178–187.

Ten Have, M.T., Vollebergh, W., Bijl, R., & Ormel, J. (2002). Combined effect of mental disorder and low social support on care service use for mental health problems in the Dutch general population. *Psychological Medicine*, *32*(2), 311–323.

Tischler, G.L., Henisz, J.E., Myers, J.K., & Boswell, P.C. (1975a). Utilization of mental health services: I. Patienthood and the prevalence of symptomatology in the community. *Archives of General Psychiatry*, *32*(4), 411–415.

Tischler, G.L., Henisz, J.E., Myers, J.K., & Boswell, P.C. (1975b). Utilization of mental health services: II. Mediators of service allocation. *Archives of General Psychiatry*, *32*(4), 416–418.

Vasiliadis, H.M., Tempier, R., Lesage, A., & Kates, N. (In press). General practice and mental health care: Determinants of outpatient service use. *The Canadian Journal of Psychiatry*.

Veroff, J., Kulka, R., & Douvan, E. (1981). *Mental health in America*. New York: Basic Books.

Vézina, J., & Giroux, L. (1988). L'Échelle des Embêtements: une étude de validation et d'adaptation du Hassles Scale pour une population adulte âgée. Paper presented at the meeting of the Canadian Psychological Association, Montreal, June.

Volkers, A.C., Nuyen, J., Verhaak, P.F., & Schellevis, F.G. (2004). The problem of diagnosing major depression in elderly primary care patients. *Journal of Affective Disorders*, *82*(2), 259–263.

Von Korff, M., Katon, W., & Lin, E. (1990). Psychological distress, physical symptoms, utilization and cost-offset effect. In N. Sartorius, D. Goldberg, et al. (Eds.), *Psychological disorders in general settings* (pp. 159–169). Toronto: Hogrefe & Huber.

Wang, P.S., Lane, M., Olfson, M., Pincus, H.A., Wells, K.B., & Kessler, R.C. (2005). Twelve-month use of mental health services in the United States: Results from the national comorbidity survey replication. *Archives of General Psychiatry*, *62*(6), 629–640.

Wang, P.S., Berglund, P.A., Olfson, M., & Kessler, R.C. (2004). Delays in initial treatment contact after first onset of a mental disorder. *Health and Service Research*, *39*(2), 393–415.

Waxman, H.M., Carner, E.A., & Klein, M. (1984). Underutilization of mental health professionals by community elderly. *The Gerontologist*, *24*(1), 23–30.

Wells, K.B., Manning, W.G., Duan, N., Newhouse, J.P., & Ware, J.E.Jr. (1986). Socio-demographic factors and the use of outpatient mental health services. *Medical Care*, *24*(1), 75–85.

Weinberger, M., Hiner, S.L., & Tierney, W.M. (1987). In support of hassles as a measure of stress in predicting health outcomes. *Journal of Behavioral Medicine*, *10*(1), 19–32.

Wetherell, J.L., Kaplan, R.M., Kallenberg, G., Dresselhaus, T.R., Sieber, W.J., & Lang, A.J. (2004). Mental health treatment preferences of older and younger primary care patients. *International Journal of Psychiatry in Medicine*, *34*(3), 219–233.

Wittchen, H.U., Robins, L.N., Cottler, L.B., Sartorius, N., Burke, J.D., & Regier, D. (1991). Cross-cultural feasibility, reliability and sources of variance of the Composite International Diagnostic Interview (CIDI). *British Journal of Psychiatry*, *159*(5), 645–653.

Zemore, R., & Eames, N. (1979). Psychic and somatic symptoms of depression among young adults, institutionalized aged and noninstitutionalized aged. *Journal of Gerontology*, *34*(5), 716.

Zola, I.K. (1966). Culture and symptoms: An analysis of patients' presenting complaints. *American Sociological Review*, *31*(5), 615–630.

Zylstra, R.G., & Steitz, J.A. (2000). Knowledge of late life depression and aging among primary care physicians. *Aging & Mental Health*, *4*(1), 30–35.

https://doi.org/10.1017/S0714980809090011 Published online by Cambridge University Press