

HEALTH SEEKING BEHAVIOUR IN GENERAL POPULATION WITH PSYCHOLOGICAL SYMPTOMS

Zalika Klemenc-Ketis¹ & Janko Kersnik²

¹Department of Family Medicine, Medical School, University of Maribor, Maribor, Slovenia

²Department of Family Medicine, Medical School, University of Ljubljana, Ljubljana, Slovenia

received: 4.5.2013;

revised: 25.10.2013;

accepted: 5.11.2013

SUMMARY

Background: Health seeking behaviour is a complex construct in patients with psychological symptoms. The aim of this study was to determine a one-month prevalence of psychological symptoms in Slovenian general population and to identify correlates of health seeking behaviour.

Subjects and methods: This study was conducted in a representative sample of 1,002 randomly selected Slovenian citizens, stratified according to sex and age. We used a method of computer assisted telephone interview (CATI). The questionnaire consisted of demographic questions, questions about the prevalence and duration of preselected symptoms in the past month (irritability, nervousness), questions about the presence of chronic diseases, EQ-5D questionnaire and the questions on health seeking behaviour (self-treatment, lay advice seeking and medical advice seeking).

Results: The self-reported prevalence of psychological symptoms in the past month was 38.0% (381/1,002). Multivariate analysis for the presence of self-reported psychological symptoms revealed that female sex, higher age, the presence of chronic disease, primary education, lay-advice seeking, pain and the presence of anxiety/depression on EQ-5D questionnaire were independently associated with psychological symptoms.

Conclusions: Psychological symptoms are a major public health problem in Slovenian general adult population and the self-reported utilization of professional health care services by Slovenian population is high. Other patterns such as lay referral system might have a crucial influence on the final decision to seek medical help.

Key words: illness behaviour - depressive symptoms – population - cross-sectional study

* * * * *

INTRODUCTION

Psychological symptoms are a frequent phenomenon as they can be present in almost three quarters of general population (Eaton 1995) and half of the population can suffer from a psychiatric disease at least once in their life time (Kessler et al. 2005a). People with psychological symptoms are frequent users of health care system (Salsberry et al. 2005, Portegijs et al. 1996) and can be often regarded as difficult patients (Portegijs et al. 1996). It has been shown that psychiatric disorders account for a quarter of family practice visits (Klemenc-Ketis et al. 2010, King et al. 2008), with depression and anxiety being the most common diseases encountered by family doctors (Klemenc-Ketis et al. 2010, Klemenc-Ketis et al. 2009).

Health seeking behaviour is defined as an action undertaken by individuals who perceive themselves as having a health problem or to be ill for the purpose of finding an appropriate remedy (Wade et al. 2004). Only the minority of people with mental diseases seek professional help (Alonso et al. 2004) but their help seeking is subjected to the same patterns as help seeking in people with any symptoms. Namely, they can progress through several stages before they actually decide to seek mental help. As suggested by theoretical models, the process of health seeking by people with such symptoms consists of experiencing symptoms,

trying to evaluate their significance, assessing if they can manage them by themselves or if treatment is required, assessing the feasibility of and options for treatment, and deciding whether to seek treatment or not (Goldberg et al. 1980).

Health seeking behaviour is associated with socio-demographic factors, such as age, sex, education, socio-economic status, race and ethnicity, religion and marital status (Young 2004, Harding et al. 2002). But also socio-cultural dimensions are important, i.e. social networks, lay advice seeking (lay referral system), country economics, geographic and other dimensions (Young 2004). Lay referral system refers to seeking health-related advices from relatives and friends and own perception of the severity of symptoms or own health beliefs (Harding et al. 2002). It describes an important part of illness behaviour by showing that the individual response to illness is largely influenced by advices from family members, friends and colleagues (collective influence) (Harding et al. 2002). This might be of a crucial importance when dealing with health seeking behaviour of people with psychological symptoms as they have to face the existing stigma of mental diseases in general population. Namely, the results of previous studies suggest that mental illness stigma might have a negative influence on attitudes and intentions toward seeking mental health services (Conner et al. 2010, Aromaa et al. 2011). The strong

influence of personal factors on mental health seeking was demonstrated also by the results of a recent study (McCracken et al. 2006) indicating that individual participant factors provided greater explanatory power than national differences in health care delivery.

As obvious, health seeking behaviour of people experiencing psychological symptoms is a complex phenomenon which should be thoroughly studied in order to improve the quality of care of such people, to promote self-identification of psychological symptoms in the population and to tailor effective screening activities to identify persons at risk. Therefore, we decided to perform this study. Its aim was to identify a one-month prevalence of psychological symptoms in Slovenian general population and to find correlates of health seeking behaviour.

SUBJECTS AND METHODS

Subjects

The data presented in this paper were collected in a large observational cross-sectional study that took place in June 2011 in Slovenia. The study was conducted in a representative sample of 1,002 randomly selected Slovenian citizens, stratified according to sex and age.

Methods

We used a method of computer assisted telephone interview (CATI) (Groves et al. 2001). The whole questionnaire consisted of various parts and here we only described those questions from the questionnaire that were used for this article. These were the questions on demographic variables (Table 1), questions about the prevalence and duration of preselected symptoms (irritability and nervousness) in the past month (“In the previous month, did you experience irritability?”; “In the previous month, did you experience nervousness?”) and questions about the presence of chronic diseases (“Are you being treated due to any disease for at least past 6 months?”). The questionnaire also included EQ-5D questionnaire (Kind et al. 1998) (Table 1) and the questions about health seeking behaviour due to any reported symptom in the past month (self-treatment, lay advice seeking and medical advice seeking) (Table 1). Self-treatment included the use of over-the-counter drugs and prescription drugs from left-overs in home pharmacies or given by relatives and friends and visits to healers. Lay advice included the advice received from relatives and friends or sought in books and on the Internet. Medical advice included seeing a family doctor or a clinical specialist, visiting an emergency room, staying at the hospital, receiving a home visit or paying a visit to a private health care provider.

Statistical Analyses

We created new dichotomous variables from EQ-5D questions (Kind et al. 1998): respondents who answered

with “no” were assigned to the group “no problems” and other were assigned to group “problems”. Additionally, we formed a new variable entitled psychological symptoms, which included the variables irritability and nervousness. We performed a descriptive analysis, a bivariate analysis (independent t-test and chi-square test) and multivariate analysis (logistic regression), controlled for sex and age, in which we included all variables that proved significant in bivariate analysis. For the multivariate analysis, we created dichotomous variables for those categorical variables with more than two values (based on median value). For other statistical tests, we set the limit for statistical significance at $p < 0.05$. We performed a statistical analysis with Statistical Package for Social Sciences (SPSS) v. 19.0 (SPSS, Inc., IBM).

We obtained an ethical approval from Slovenian National Ethics Committee (No. 105/04/09).

RESULTS

Out of 1,002 people in the sample, 490 (48.9%) were men (Table 1). Average age \pm standard deviation (SD) of the sample was 46.6 ± 18.2 years.

381 interviewees (38.0%) reported prevalence of psychological symptoms in the past month. Female sex, lower education, lower income and the presence of chronic disease were significantly associated with higher and being employed was significantly associated with lower prevalence of psychological symptoms (Table 1). Participants with self-reported psychological symptoms significantly more often practiced self-treatment, asked for lay advice and sought medical help (Table 1). Also, the presence of psychological symptoms was associated with lower quality of life on most EQ-5D items (Table 1). Age did not have significant association with the presence of psychological symptoms in bivariate analysis.

However, multivariate analysis for the presence of self-reported psychological symptoms revealed that female sex, higher age, the presence of chronic disease, primary education, lay-advice seeking, pain and the presence of anxiety/depression on EQ-5D questionnaire were independently associated with psychological symptoms (Table 2).

DISCUSSION

This study showed that more than one third of Slovenian general population have experienced psychological symptoms in the past month, which is more than reported by other studies (Kessler et al. 2005, King et al. 2008, Narrow et al. 2002). We must bear in mind that the prevalence in our study reports on symptoms and not on actual mental diseases, which could be the reason for higher prevalence. This was confirmed also in other studies showing a 30% prevalence of psychological symptoms among general

Table 1. Demographic characteristics of the sample (N=1,002) and their effect on psychological symptoms' prevalence

Characteristic	N (%) of the sample	N (%) of the sample with psychological symptoms in all of the past month	p value
Sex			0.027
Male	490 (48.9)	169 (34.5)	
Female	512 (51.1)	212 (41.4)	
Education			0.003
Primary	129 (12.9)	62 (48.1)	
Vocational	186 (18.5)	81 (43.5)	
Secondary	391 (39.0)	146 (37.3)	
University	275 (27.4)	88 (32.0)	
Postgraduate	22 (2.2)	4 (18.2)	
Monthly income (ref. 950 EUR)			0.001
Much lower	265 (27.3)	119 (44.9)	
Slightly lower	191 (19.7)	75 (39.3)	
Almost the same	182 (18.8)	66 (36.3)	
Slightly higher	149 (15.4)	47 (31.5)	
Much higher	41 (4.2)	5 (12.2)	
No income	141 (14.6)	56 (39.7)	
Lay advice seeking*			<0.001
Yes	372 (37.1)	222 (59.5)	
No	412 (41.1)	159 (38.5)	
Medical help seeking [†]			0.002
Yes	410 (40.9)	221 (53.9)	
No	375 (37.4)	160 (42.7)	
Self-treatment [‡]			<0.001
Yes	536 (53.5)	286 (53.4)	
No	249 (24.8)	95 (38.2)	
Mobility problems			<0.001
Yes	228 (22.7)	117 (51.5)	
No	775 (77.3)	264 (34.1)	
Problems with self-care			0.596
Yes	35 (3.5)	15 (42.9)	
No	968 (96.5)	366 (37.8)	
Pain/discomfort			<0.001
Yes	290 (29.0)	169 (58.3)	
No	711 (70.9)	211 (29.7)	
Difficulties in usual activities			<0.001
Yes	128 (12.8)	76 (58.9)	
No	874 (87.2)	306 (35.0)	
Anxiety/depression			<0.001
Yes	150 (15.0)	118 (78.7)	
No	850 (84.8)	263 (31.0)	
Employed			0.007
Yes	573 (57.1)	197 (34.4)	
No	430 (42.9)	184 (42.8)	
Unemployed			0.226
Yes	96 (9.6)	42 (43.8)	
No	906 (90.4)	339 (37.4)	
Retired			0.058
Yes	312 (31.1)	133 (42.5)	
No	690 (68.9)	249 (36.0)	
Chronic condition			<0.001
Yes	322 (32.1)	165 (51.2)	
No	681 (67.9)	217 (31.9)	

* "In the past month, did you seek health advice from your relatives?"; "In the past month, did you seek health advice from your friends?"; "In the past month, did you seek health advice in books?"; "In the past month, did you seek health advice on Internet?"

[†] "In the past month, did you go to your family doctor?"; "In the past month, did you go to emergency room?"; "In the past month, did you go to a clinical specialist?"; "Were you hospitalized in the past month?"; "Did your doctors come to a house visit in the past month?"; "In the past month, did you go to a private health care provider?"; "In the past month, did you ask for an advice your relative or friend who is a medical doctor?"

[‡] "In the past month, did you use OTC drugs?"; "In the past month, did you went to see a healer?"; "In the past month, did you use prescription drugs from home pharmacy?"; "In the past month, did you use prescription drugs given by relatives and friends?"

Table 2. Multivariate analysis* for the presence of psychological symptoms (N=1,002)

Dependent variable	Independent variables	Odds ratio (OR)	95% C.I. for OR	p-value
Presence of psychological symptoms	<i>Female sex</i>	1.430	1.034-1.978	0.031
	<i>Higher age</i>	0.982	0.968-0.997	0.015
	<i>Chronic disease present</i>	1.605	1.082-2.381	0.019
	<i>Primary education</i>	0.660	0.469-0.930	0.018
	Monthly income lower than 950 EUR	0.850	0.604-1.198	0.353
	<i>Lay advice seeking</i>	1.931	1.392-2.679	<0.001
	Medical help seeking	0.969	0.681-1.379	0.861
	Self-treatment	1.317	0.903-1.921	0.153
	Mobility problems	0.894	0.581-1.375	0.609
	<i>Pain</i>	1.770	1.194-2.625	0.005
	Difficulties in daily activities	0.810	0.471-1.391	0.445
	<i>Anxiety/depression</i>	6.615	3.950-11.077	<0.001
	Not employed	0.908	0.539-1.528	0.717
	Retired	0.810	0.418-1.570	0.810

* Nagelkerke $R^2=0.232$; Chi-square =149.011; df=14; $p<0.001$

populations (Kilkkinen et al. 2007, Molarius et al. 2009, Al-Otaibi et al. 2007). There were more female respondents, respondents with lower educational attainment, with lower monthly income, unemployed and respondents with a chronic condition suffering psychological symptoms (Tables 1 and 2), which is in line with other studies (Merikangas et al. 2002, Khan et al. 2007, Mirza et al. 2004). Respondents with psychological symptoms have lower quality of life as they reported more mobility problems, more common presence of chronic pain, more difficulties in daily activities and, of course, more common presence of anxiety and/or depression symptoms (Tables 1 and 2), which is also in line with previous findings (Klemenc-Ketis et al. 2009, Molarius et al. 2009, Al-Otaibi et al. 2007, Al-Windi 2009, Mohr et al. 2010). Expectedly, respondents with self-reported psychological symptoms were more often initiating self-treatment, asking for lay advice and seeking medical help; seeking medical help showed to be quite high (53.9% of respondents with psychological problems). Recent studies (ten Have et al. 2010, Kovess-Masfety et al. 2007) showed that a very high proportion of population with symptoms of mental diseases would seek professional help (from 55% to 90%). However, there is a lack of data reporting on an actual rate of health care utilization in such people (ten Have et al. 2010). Some studies showed that people with mental diseases underutilize mental help services (Alonso et al. 2004, Kessler et al. 2005b, Wittchen et al. 2005). Possible reasons for this are lower favourability about the effectiveness of professional help by people who experience psychological symptoms (ten Have et al. 2010) or the fear of being stigmatized (Kohn et al. 2004, Zartalouti et al. 2010). Although people with psychological symptoms are afraid of being stigmatized by both professionals and by lay people, previous studies suggest that people preferred to rely on their family and friends even when suffering from severe

mental disorders (Jorm et al. 1997, Angermeyer et al. 1996).

This was shown also in our study as the respondents with psychological symptoms preferred lay advices over professional help seeking. It seems that lay advice seeking is an important part of illness behaviour (Young 2004) also when dealing with psychological symptoms.

To our knowledge, this is the first study addressing presence of psychological symptoms in relation to health seeking behaviour in Eastern Europe. The advantages of this study are the size sample and sound methodology (Groves et al. 2001). We were able to interview a census sample of population in Slovenia (Statistical Office of Slovenia 2011), so the findings can be generalized to the whole population. The main limitations is a self-reporting nature of the symptoms and other characteristics, which could not be compared to actual data, however, use of standard methods diminishes these bias to acceptable limits.

CONCLUSION

Psychological symptoms are a major public health problem in Slovenian general adult population, especially among women, older people, those with lower education, chronic patients and people who report on suffering different levels of pain. Even though their self-reported utilization of professional health care services is high, other patterns such as lay referral system might have a crucial influence on the final decision to seek medical help.

Further studies should address the influence of other possible risk factors for the presence of anxiety and depression. Better models for the explanation of the differences should be proposed. Furthermore, health seeking behaviour among people with psychological symptoms should be more comprehensively studied.

Acknowledgements: None.

Conflict of interest: None to declare.

REFERENCES

1. Al-Otaibi B, Al-Weqayyan A, Taher H, Sarkhou E, Gloom A, Aseeri F et al.: Depressive symptoms among Kuwaiti population attending primary healthcare settings: prevalence and influence of sociodemographic factors. *Med Princ Pract* 2007; 16:384-8.
2. Alonso J, Angermeyer MC, Bernert S, Bruffaerts R, Brugha TS, Bryson H et al: Use of mental health services in Europe: results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. *Acta Psychiatr Scand* 2004, 420(Suppl):47-54.
3. Al-Windi A: Predictors of self-reported psychological and somatic symptoms in a multi-ethnic primary care practice sample. *Journal of Chinese Clinical Medicine* 2009; 4:153-65.
4. Angermeyer MC, Matschinger H: Public attitude towards psychiatric treatment. *Acta Psychiatr Scand* 94: 326-36.
5. Aromaa E, Tolvanen A, Tuulari J, Wahlbeck K: Personal stigma and use of mental health services among people with depression in a general population in Finland. *BMC Psychiatry* 2011; 11:52.
6. Conner KO, Copeland VC, Grote NK, Koeske G, Rosen D, Reynolds III CF et al.: Mental health treatment seeking among older adults with depression: the impact of stigma and race. *Am J Geriatr Psychiatry* 2010; 18:531-43.
7. Eaton WW: Progress in epidemiology of anxiety disorders. *Epidemiol Rev* 1995; 17:32-8.
8. Fortin M, Bravo G, Hudon C, Vanasse A, Lapointe L: Prevalence of multimorbidity among adults seen in family practice. *Ann Fam Med* 2005; 3:223-8.
9. Goldberg D, Huxley P: *Mental Health in the Community: The Pathways to Psychiatric care*. London:Tavistock 1980
10. Groves RM, Biemer PP, Lyberg LE: *Telephone survey methodology*. John Wiley and Sons, New York, 2001.
11. Harding G, Taylor K: Health, illness and seeking health care. *The Pharmaceutical Journal* 2002; 269:526-8.
12. Jorm AF, Korten AE, Jacomb PA, Rodgers B, Pollitt P, Christensen H et al.: Helpfulness of interventions for mental disorders: beliefs of health professionals compared with the general public. *Br J Psychiatry* 1997; 171:233-7.
13. Kessler RC, Chiu WT, Demler O, Walters EE: Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity survey replication. *Arch Gen Psychiatry* 2005a; 62:617-27.
14. Kessler RC, Demler O, Frank RG, Olfson M, Pincus HA, Walters EE et al.: US prevalence and treatment of mental disorders: 1990-2003. *N Engl J Med* 2005b; 352:2515-23.
15. Khan H, Kalia S, Itrat A, Khan A, Kamal M, Khan MA et al.: Prevalence and demographics of anxiety disorders: a snapshot from a community health centre in Pakistan. *Ann Gen Psychiatry* 2007; 6:30.
16. Kilkinen A, Kao-Philpot A, O'Neil A, Philpot B, Reddy P, Bunker S et al.: Prevalence of psychological distress, anxiety and depression in rural communities in Australia. *Aust J Rural Health* 2007; 15:114-9.
17. Kind P, Dolan P, Gudex C, Williams A: Variations in population health status: results from a United Kingdom national questionnaire survey. *BMJ* 1998; 316:736-41.
18. King M, Nazareth I, Levy G, Walker C, Morris R, Weich S et al.: Prevalence of common mental disorders in general practice attendees across Europe. *Br J Psychiatry* 2008; 192:362-7.
19. Klemenc-Ketis Z, Kersnik J, Novak-Glavac D: Determinants of depression and anxiety in family practice patients with comorbidities. *Wien Klin Wochenschr* 2010; 122(Suppl 2):35-9.
20. Klemenc-Ketiš Z, Kersnik J, Tratnik E: The presence of anxiety and depression in the adult population of family practice patients with chronic diseases. *Zdrav Vars* 2009; 48:170-6.
21. Kohn RS, Levav SI, Saraceno B: Treatment cap in mental health care. *Bulletin of the World Health Organization* 2004; 82:858-66.
22. Kovess-Masfety V, Saragoussi D, Sevilla-Dedieu C, Gilbert F, Suchocka A, Arveiller N et al.: What makes people decide who to turn to when faced with a mental health problem? Results from a French study. *BMC Public Health* 2007; 7:188.
23. McCracken C, Dalgard OS, Ayuso-Mateos JL, Casey P, Wilkinson G, Lehtinen V et al.: Health services use by adults with depression: community survey in five European countries: evidence from the ODIN study. *BJP* 2006; 189:161-7.
24. Merikangas KR, Pine D: Genetic and other vulnerability factors for anxiety and stress disorders. In Davis KL, Charney D, Coyle JT, Nemeroff C (eds). *Neuropsychopharmacology: The fifth generation of progress*. American College of Neuropsychopharmacology, 2002.
25. Mirza I, Jenkins R: Risk factors, prevalence, and treatment of anxiety and depressive disorders in Pakistan: systematic review. *BMJ* 2004; 328:794.
26. Mohr P, Bitter I, Švestka J, Seifritz E, Karamustafalioglu O, Koponen H & Sartorius N: Management of depression in the presence of pain symptoms. *Psychiatr Danub* 2010; 22:4-13.
27. Molarius A, Berglund K, Eriksson C, Eriksson HG, Linden-Boström M, Nordström E et al.: Mental health symptoms in relation to socio-economic conditions and lifestyle factors – a population-based study in Sweden. *BMC Public Health* 2009; 9:302.
28. Narrow WE, Rae DS, Robins LN, Reiger DA: Revised prevalence estimates of mental disorders in the United States. *Arch Gen Psychiatry* 2002; 59:115-23.
29. Portegijs PJ, van der Horst FG, Proot IM, Kraan HF, Gunther NC, Knottnerus JA: Somatization in frequent attenders of general practice. *Soc Psychiatry Psychiatr Epidemiol* 1996; 31:29-37.
30. Salsberry PJ, Chipps E, Kennedy C: Use of general medical services among Medicaid patients with severe and persistent mental illness. *Psychiatr Serv* 2005; 56:458-62.
31. Statistical Office of the Republic of Slovenia. Online: <<http://www.stat.si/>>
32. ten Have M, de Graaf R, Ormel J, Vilagut G, Kovess V, Alonso J: Are attitudes towards mental health help-seeking associated with service use? Results from the European Study of Epidemiology of Mental Disorders. *Soc Psychiatr Epidemiol* 2010; 45:153-63.

33. Wade DT, Halligan PW: Do biomedical models of illness make for good healthcare systems? *BMJ* 2004; 329:1398-401.
34. Wittchen HU, Jacobi F. Size and burden of mental disorders in Europe – a critical review and appraisal of 27 studies. *Eur Neuropsychopharmacol* 2005; 15:357-76.
35. Young JT: Illness behaviour: a selective review and synthesis. *Sociol Health Illn* 2004; 26:1-31.
36. Zartaloudi A, Madianos MG: Mental health treatment fearfulness and help-seeking. *Issues Ment Health Nurs* 2010; 31:662-9.

Correspondence:

Zalika Klemenc-Ketis
Kersnikova 1, 3320 Velenje, Slovenia
E-mail: zalika.klemenc-ketis@uni-mb.si