ABSTRACT

Objective: *We scrutinize the health care use of divorcees, in order to explain why users of mental health care have a higher risk of perceiving an unmet need. We hypothesize that a perception of low helpfulness of received care heightens the risk of perceiving an unmet need and becoming a less frequent health care user.*

Methods: *Three subsamples from the Divorce in Flanders survey are selected: those who contacted a general practitioner (N=816), a psychiatrist (N=205), or a psychologist (N=251) because of social or emotional problems. Logistic regressions are used in order to explore the correlates of subjective unmet need and the frequency of contact with a health care provider among each subsample.*

Results: *Results show that patients who perceived that care was not helpful more often reported an unmet need and made less frequent use of health care.*

Conclusions: *These findings suggest that people are less inclined to seek further help when they perceive previous help as being ineffective.*

Key words: mental health care, perceived helpfulness, subjective unmet need, divorce

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BACKGROUND

Traditionally, research on unmet need for health care use is dominated by the 'need-adjusted' approach based on Andersen' behavioral model (1995) (also referred to as 'population standard approach'), in which researchers define and adjust for indicators of 'need' and subsequently assess whether socio-economic inequalities in health care use persist. It is clear that in this so-called objective approach (Asada & Kephart, 2011; Mechanic & McAlpine, 2010), an appropriate definition of 'need' is of vital importance, but several concerns have been raised. First of all, research on need-adjusted utilization implicitly assumes that those who have poor health do, by definition, need professional care. However, some people prefer to deal with their problems on their own, applying alternative strategies like changing their life style, turning to cognitive behavioral approaches, or relying on support networks (Asada & Kephart, 2011; Nelson & Park, 2006). For example, Edlund and colleagues (2009) found that 80% of those who were defined as unmet need cases did not actually perceive a need for care. Moreover, it is assumed by definition that those who receive care are being helped, without considering the quality and effectiveness of the received care. Thirdly, need is a slippery and value-loaded concept (Culyer, 1995). The following dilemma concerning age illustrates the inevitable normative judgments researchers need to make. Should age be considered as a need factor or should entitlement to health care decline with age, because the capacity of older people to benefit from health care is decreasing (Williams & Evans, 1997)? Because of this equivocality of the need factor, many methodological difficulties persist, such as a lack of a clear definition (Nelson & Park, 2006) and standardized measures (Craske et al., 2005; Mechanic & McAlpine, 2010).

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Given these numerous difficulties, researchers have started to adopt an alternative, more subjective approach (also referred to as the 'direct approach'), in which respondents are simply asked whether they perceive an unmet need for health care (Asada & Kephart, 2011). So, instead of the researcher, it is the respondents themselves who assess whether they experience a need for care, without seeking this care. Somewhat surprisingly, these recent studies show consistently that health care users more often perceive an unmet need than do non-users, even after health status is controlled for (Colman, Symoens, & Bracke, 2012; Kjeken et al., 2006; McColl & Jarzynowska, 2010). The question has now emerged of how these elevated levels of unmet need among health care users can be explained. To the best of our knowledge, the study by Kjeken et al. (2006) is the only one that has investigated a possible pathway leading to a heightened risk of subjective unmet need among health care users. More specifically, they showed that dissatisfaction with received care is related to higher levels of subjective unmet need among patients with rheumatoid arthritis and ankylosing spondylitis (Kjeken et al., 2006).

However, for users of mental health care, the mechanisms leading to the heightened risk of subjective unmet need remain unexamined. Especially in the light of the ubiquitousness of mental health problems, it is essential to shed further light on this issue (Spinney, 2009). Nelson and Park (2006) have suggested that the elevated levels of unmet need among users of mental health care might be due to the increasing awareness of the limitations of these services, but this explanation has never been tested empirically. In line with this, a recent study in the Netherlands and Australia has shown that the thought that professional care would not help is the second most cited reason for not seeking care (Prins et al., 2011).

In the present study, we consider two indicators of the hesitation to seek help from a professional care provider (subjective unmet need and frequency of use). In doing so, we combine the subjective approach with the traditional objective approach.

Subjective unmet need is defined as perceiving a need for care because of social or emotional problems without actually seeking this care. We hypothesize that those who feel that they have not really been helped by the care they have received will more often perceive a subjective unmet need (hypothesis 1). If this hypothesis is correct, it would suggest that people who feel that they have not been helped will more often hesitate to return to their health care provider if they are confronted with problems again. In line with this assumption, a study of Colman and colleagues, employing the same survey data as the current study, has shown that non-frequent health care users more often perceive an unmet need than frequent health care users and non-users (Colman et al., 2012). We thus predict that a lower perception of helpfulness will be associated with less frequent contacts among health care users (hypothesis 2a). However, if we draw on patient satisfaction literature, an alternative hypothesis can be formulated. More specifically, this research stance has shown that patient satisfaction, perceived helpfulness, and trust in physicians are related to better treatment outcomes and the future use of health care (Brown & Calnan, 2013; Kjeken et al., 2006). Therefore, for patients who perceive received help as effective, we could expect better treatment outcomes and consequently, fewer contacts with the health care provider (hypothesis 2b).

We focus on a vulnerable group that is often overlooked in the study of the determinants of health care use, namely the divorced. Research into the effects on mental health of divorce

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is abundant and indicates higher levels of depression, stress, and fear, as well as lower levels of self-esteem among the divorced, compared to the married (Amato, 2010; Symoens, Van de Velde, Colman, & Bracke,2013; Williams & Dunne Bryant, 2006). Despite their growing demographic importance, little is known about how this heightened risk of mental health problems is translated into health care use. The limited research on this topic consistently shows that the divorced have a higher use of mental health care than the married, even after taking mental health differences into account (Bracke, Colman, Symoens, & Van Praag, 2010; Colman et al., 2012; Wang, 2004; Wang et al., 2005). Therefore, these frequent health care users form an interesting group to study the relationships between the perceived quality of care, subjective unmet need, and health care use.

METHODS

Sample and population

The research data relates to Flanders, the Dutch-speaking part of Belgium, whose health care system is valued for its accessibility and extensiveness (Kerr & Siebrand, 2000; Hermans, De Witte & Dom; 2012). Since health insurance is compulsory and largely publicly financed, large inequalities in health care insurance such as in the United States are absent (van Doorslaer & Jones, 2004). Hence, subjective unmet need is less likely to be affected by financial barriers.

We employed the Divorce in Flanders Survey (DiF) data (http://www.divorceinflanders.be) (Mortelmans et al., 2011). The survey is based on a sample of marriages instead of individuals. More specifically, we got permission from the Commission for the Protection of Privacy (CPP) to take a sample from the Public Register of heterogamous intact and broken

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marriages conducted in Flanders, legally formed between 1971 and 2008, of which both partners have been Belgian nationals since birth and are currently alive and domiciled in Flanders. Only first marriages were included; broken marriages in which one or both partners have divorced more than once were excluded.

Marriages were selected by proportionally stratified sampling by marriage cohort. To make sure that the broad diversity of the population of divorcees would be captured, broken marriages were oversampled (one third intact vs. two thirds broken) within every marriage cohort. Both partners (or current ex-partners) were contacted individually for their participation[1]. Respondents were questioned during 2009–2010 using a computer-assisted personal interview (CAPI). This resulted in a response rate of 43.3% among the divorced and 39.5% among the married, and a sample of 4538 respondents. Descriptive analyses of this sample and the correlates of professional health care use and subjective unmet need can be found elsewhere (Colman et al., 2012).

In the present study, we only consider the health care users in the DiF sample. Respondents were asked which of the following health care providers they had contacted because of social or emotional problems: a general practitioner, a psychiatrist, another doctor-specialist, a psychologist, a relational or family therapist, or an alternative practitioner. Since we take depressive symptoms as an indicator of 'need', we focus on the health care providers that are most likely to be contacted for such problems. Therefore, separate analyses are conducted among clients of GPs (N = 816), psychiatrists (N=204), and psychologists (N = 250). Some respondents (N = 212) have contacted more than one of these health care providers and are included in multiple analyses. As women more often contact a

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health care provider because of social or emotional problems (Colman et al.,2012), they constitute two thirds of each sample are women (see Table 1).

Dependent variables

Subjective unmet need is measured by the question: 'Was there ever a time in the past 12 months when you thought you needed professional help for your social or emotional problems, but you did not seek professional help?' The second dependent variable, namely the *frequency of health care use* is based on the question of how often the respondent had contacted a particular provider. This question was asked for each consulted type of health care provider. The five possible answer categories were recoded into less frequent health care use (only one or several contacts during the past year) and frequent health care use (monthly, every two weeks, and weekly or more contacts).

Independent variables

Perceived helpfulness of received care is assessed by the question of to what extent this professional health care provider had been able to help the respondent. This question was asked for each category of health care provider contacted. Answers ranged from 'not at all' (0) to 'very much' (4). Several commonly used socio-demographic variables are included, such as *gender* (reference category = men), *age* (in three categories: 24-39 years; 40-49 years (reference category) and 50-64 years), and *partner status*. Because never-married and widowed people are excluded from the survey, only three categories of *partner status* are retained: 1, the married who have never been divorced (reference category); 2, the partnered divorced (who are currently living with a partner in the household, whether they have remarried or not); and 3, the non-partnered divorced.

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Socio-economic position is assessed using multiple indicators: income, education, and employment status. Information on *household income* and received alimony is used to calculate the *equivalent household income (EHI).* Weighting for household composition is based on the Equivalent Income OECD modified scale (Haagenars, De Vos, & Zaidi, 2011). This scale gives a weight of 1 to the first adult of the household, 0.5 to all other adults (> 14 years old), and 0.3 to children. These weighted scores are divided into five income categories: less than 50% of the median EHI, 50 to 80%, 80-120%, and those earning 120% or more than the median EHI. Respondents with missing information on income are assigned to a separate category.

Three *educational levels* are defined: high educational level (tertiary and non-tertiary), middle (upper secondary; reference category) and low educational level (preprimary, primary, and lower secondary). Lastly, current *employment status* is identified using the following categories: full-time employed (reference category), part-time employed, inactive because of chronic illness, and unemployed.

Depression is adopted as the indicator of mental health status, measured by the 8-item version of the Center for Epidemiologic Studies Depression (CES-D8) scale. In its original version, the CES-D consists of 20 self-reported items to identify populations at risk of developing depression (Radloff, 1977). The CES-D8 reports the frequency and severity of certain feelings and behaviors in the preceding week. Respondents are asked how often they felt depressed, felt that everything was an effort, slept restlessly, were happy, felt lonely, enjoyed life, felt sad and could not get going. Answers range from none or almost none of

the time (0) to all or almost all of the time (3). The numerated scores on the items result in a scale ranging from 0 to 24. We do not use cut-offs, but consider depression as a continuous phenomenon with higher scores marking a higher frequency and severity of depressive complaints. The CES-D8 scale has a high reliability in the total sample of health care users (Chronbach's alpha = 0.87), and among those with and without subjective need (Chronbach's alpha = respectively 0.88 and 0.86).

Analysis procedures

First, simple descriptives are calculated for each subsample separately (table 1 and table 2). Next, stepwise logistic regressions are conducted among each subsample of health care users for both dependent variables: subjective unmet need (table 3) and frequency of use (table 4). In the first step, the basic model is estimated (all socio-demographic variables and the 'need' variable) and perceived helpfulness is then added in the second step. For the sake of conciseness, we only report the second step in the tables. For the first step we do tabulate two goodness-of-fit indicators so that by comparing those with the full model, we can assess the importance of the mechanism of perceived helpfulness. Firstly, the -2Loglikelihood (-2LL) gives an indication of the overall goodness of the model fit, with lower scores indicating a better model. To evaluate whether a model performs significantly better than a previous one, the change in -2LL between two models is assessed with a Chi² difference test. The number of degrees of freedom of the Chi² distribution equals the number of added or removed parameters (, 2000). Secondly, the Nagelkerke R^2 is designated as a pseudo R^2, and provides the proportional reduction in log-likelihood of the estimated model compared to the empty null model (Van Rossem, 2010). All analyses are conducted using PASW Statistics 18.

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RESULTS

Descriptives

About one quarter of the sample of health care users felt a need for care without seeking it. The prevalence of subjective unmet need is 26.1% among respondents who had contacted a GP, 20.0% among those who had contacted a psychiatrist, and 25.9% among those who had contacted a psychologist.

Psychiatrists (45.9%) and psychologists (42.6%) were more frequently contacted by health care users then GP patients. About one quarter (25.6%) of the GPs' patients had contacted their practitioner at least once a month.

*** Table 1 around here ***

*** Table 2 around here ***

The mean scores (Table 2) on perceived helpfulness are very similar among respondents who had contacted general practitioners (mean = 2.59, SD = 0.90), psychiatrists (mean = 2.52; SD = 1.11), and psychologists (mean = 2.46; SD = 1.08). For the interpretation of these figures, it is also informative to look at the number of patients who reported that the received care was not (really) helpful (see Table 1). It seems that this is true for a substantial number of patients. In respect of GPs (40.2%), psychiatrists (46.0%), and psychologists (46.0%), a large number of patients reported being helped a little bit, hardly or even not at all (results not shown in table).

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Results of multivariate logistic analyses

Subjective unmet need

Table 3 shows that for each type of health care provider hypothesis 1 can be confirmed. Even after controlling for 'need', patients who perceive the care as helpful are less likely to report a subjective unmet need. This is also illustrated by a significant drop in -2LL after adding this variable (GP: Δ-2LL: 10.1, df = 1, p<0.01; Psychiatrist: Δ-2LL: 4.4, df = 1, p<0.05, Psychologist: Δ-2LL: 4.0, df = 1, p<0.05). Moreover, it also seems that the 'need' factor is associated with subjective unmet need. Health care users with a higher frequency and severity of depressive symptoms are more likely to report a need for care without seeking it. This finding is true for all subsamples, although the impact of depression is only borderline significant in the sample of psychiatrists' patients (O.R. = 1.070; sig. = 0.062).

The presence of a partner seems to be of crucial importance, regardless of whether this is a partner in an intact marriage or a new partner after a divorce. Results show no differences in subjective unmet need between the married and the divorced who live with a new partner. However, the divorced without a new partner more often perceive an unmet need in the sample of those who have contacted a GP (OR = 1.825*). Results from the other samples point in the same direction, but do not reach statistical significance.

Since the main focus of the objective approach is traditionally to look at socio-economic differences after controlling for need factors, it is interesting to see whether differences in subjective unmet need are present among different socio-economic groups. Only small associations between socio-economic differences and subjective unmet need are found. Only among clients of GP's, the highest income group more often has the feeling of needing

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care without seeking. Among GP's clients, the young are more likely to report a subjective unmet need, while the chronically ill report less so. No gender or educational differences are observed. Among psychiatrists' and psychologists' patients, marital status, gender, age, educational level, income, and work status show no association with subjective unmet need.

*** Table 3 around here ***

Frequency of health care use

Consistent with hypothesis 2a, we find that patients who report that the care they received was helpful are more often frequent health care users (see table 4). This finding holds for all three samples, even after controlling for the need for care. Moreover, the explanatory power of perceived helpfulness is also illustrated by a statistically significant drop in the model fit for each subsample (GPs sample Δ-2LL: 18.0, df = 1, p<0.001; psychiatrists sample Δ-2LL: 5.7, df = 1, p<0.05; psychologists sample Δ-2LL: 33.0, df = 1, p<0.001)) and an increase in Nagelkerke R^2. We also find that respondents with more severe or frequent depressive symptoms are more likely to be frequent users of GPs' and psychiatrists' care. Likewise, respondents who are chronically ill are more likely to be frequent users of GPs' care, as well as psychologists' care. In the sample of respondents who had contacted a GP, we find that those who are divorced and not living with a new partner are more often frequent health care users. Results in the other samples point in the same direction but are not significant. We find that men are probably more often frequent visitors to psychologists (OR = 2.12*). No socioeconomic differences are found.

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*** Table 4 around here ***

DISCUSSION

Previous research has indicated that those who receive care have a higher risk of experiencing an unmet need, even after controlling for indicators of the need for care. The aim of this study is to examine how perceived helpfulness is related to subjective unmet need and frequency of mental health care use. As such, both the subjective and the objective approach are studied in combination, using the same data. Different results for both approaches are therefore 'real' differences, which are not attributable to methodological artifacts such as a non-comparable sample or differences in omitted variable bias.

Several interesting insights are worth noting. First of all, we find that a large proportion (at least 40%) of each sample of health care users do not feel they have been satisfactorily helped. This is in line with ten Have and colleagues (2010), who found that former users of mental health care are skeptical regarding the effectiveness of professional care. In their study, among 30% of respondents felt that professional care for emotional problems was more or less equal to no help. This low rate of perceived helpfulness among patients is worrying, since we find that these patients also more often report an unmet need and are less inclined to contact a professional health care provider if they face social or emotional problems. These findings also question the basic assumption of the objective approach based on need-adjusted analyses of health care use: that those who receive professional care are automatically being helped.

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Another interesting finding is that people confronted with social or emotional problems most often turn to a GP, and less often to a psychiatrist or psychologist. This is in line with other studies showing that most mental health problems are treated in general practice (Paykel & Priest, 1992). As such, GPs are the most accessible health care providers and play an important role in the acknowledgement, treatment, and referral services of people with emotional or social problems. Although some authors conclude GPs perform quite well in the recognition of mental health problems (Hyde et al., 2005), others report GPs under-diagnose and under-treat mental health problems (Klinkman, 2003; Paykel & Priest, 1992). Given the high and still increasing prevalence of mental health problems such as depression, it is important that GPs are properly trained to detect problems and to arrange the appropriate treatment.

Considering need factors, we find that depressive symptoms are positively associated with more frequent care use and heightened risk at perceiving an unmet need. Surprisingly, being chronically ill is associated with more frequent care use and a lower risk at experiencing an unmet need for social or emotional problems, especially among the sample of patients of GP's. A possible explanation for these findings could be that these patients visit their GP more often as a consequence of this chronic illness, which creates more opportunities to discuss their social or emotional problems.

Concerning the impact of divorce, we find that compared to the married, the divorced without a new partner consume more mental health care services than we would expect, based on indicators of the need for care. Nonetheless, single divorcees still more often

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perceive an unmet need. These findings suggest that single divorcees often perceive a need for care which is only partly captured by the objective indicators of the need for care as used in traditional research into the use of mental health care. A possible explanation for their high rates of subjective unmet need and health care use can be sought in the accumulation of problems among them. Single divorcees can be considered a vulnerable group, experiencing financial hardship and lack of social support. However, previous research has shown that when these factors are taken into account, differences in health care use and subjective unmet need still persist (Colman et al., 2012), which suggests that this explanation is not sufficient. Given the fact that no differences are found between the married and the divorced living with a new partner, the higher use of health care by single divorcees might be due to the lack of a partner, instead of the divorce itself. Another possible explanation may be that these divorced singles have contacted a professional care provider with regard to problems that most other people can discuss with their partner, or with regard to problems arising from the stress that stems from having the sole responsibility of maintaining the household. Hence, care providers should inquire their patients after these problems, in order to be able to help or to refer them to other care providers who are better placed to deal with these kind of problems.

For policy makers, this study shows that when inequity in health care is solely assessed in terms of the number of contacts with health care providers, an important part of the picture is ignored. Since perceived helpfulness can be seen as an indicator of the quality of care, this study has shown that even among mental health care users, all needs are not being met because of the low perceived quality of care. Based on these findings we argue that an effort should be made to improve the quality of care. Previous studies have shown that treatment

quality can be improved by providing more information on the diagnosis and treatment to the patients and their relatives (Brown & Calnan, 2013; Tyson et al., 2002) by making enough time for patients, achieving constructive dialogue with patients, discussing their needs and expectations (Brown, & Calnan, 2013; Naber & Kasper, 2000), and by actively involving patients in their treatment planning (Bhugra, La Grenade, & Dazzan, 2000). Hence, psychiatric nurses could also play an important role in the improvement of the quality of care, as they are well-placed to build trusting relationship with patients, to discuss the patient's needs and whether they feel the treatment is working. They could act as an intermediary, detecting problems or doubts among patients, reporting these to the treating psychiatrist or GP.

LIMITATIONS

When interpreting these results, it is important to keep some limitations in mind. First, there are some problems regarding the factor of time. The survey has a cross-sectional design, in which respondents were asked whether they had felt a need for care but did not seek professional help during the preceding year, whether they had contacted a professional health care provider, how often they had contacted this provider, and to what extent they felt the received care was helpful. We consider perceived helpfulness as a predictor of subjective unmet need and frequency of health care use, but in reality the time ordering is less clear. For example, a low level of perceived helpfulness might be a consequence of less frequent health care use, when patients do not complete all the required therapeutic sessions. More research, based on longitudinal data in particular is required to permit causal conclusions. Moreover, we consider depressive symptoms during the preceding week as a predictor of subjective unmet need and frequency of health care use during the preceding

year, which might hinder the interpretation of the findings. Therefore caution is needed when making causal interpretations.

Second, the applied assessment of the 'need' for care because of social or emotional problems, namely depressive symptoms, might be too narrow to capture all the variety of reasons why people would contact a general practitioner, psychiatrist or psychologist when facing social or emotional problems. However, by controlling for depressive symptoms, we take account of the most common mental disorder (Spinney, 2009). Moreover, as lay people often experience mental health problems as somatic symptoms (Backenstrass, Joest, Rosemann & Szecsenyi, 2012), a considerable number of visits to health care providers concerning somatic problems that are in fact symptoms of mental health problems are not included when only health care use because of social or emotional problems is considered.

Third, we have no idea about the expectations that people hold regarding health care, and how these might be related to subjective unmet need. Little evidence exists that satisfaction with care automatically results when expectations are met (Thompson & Sunol,1995). It is clear that further research is very necessary in order to disentangle additional mechanisms occasioning subjective unmet need.

Lastly, as a consequence of the sample design, results cannot be generalized to the overall population of patients of GP's, psychiatrists and psychologists. As we employed subsamples of health care users from a more general survey on the consequences of divorce, divorcees and women are overrepresented in these subsamples.

CONCLUSIONS

Despite these limitations, we believe that this study provides a valuable contribution to the field. It is the first to empirically examine a possible pathway that can explain higher levels of subjective unmet need among health care users. Results show that patients who perceived that care was not helpful more often reported an unmet need and made less frequent use of health care, suggesting that people are less inclined to seek further help when they perceive previous help as being ineffective. Longitudinal data on this topic in large population samples is essential to illuminate further on this topic, but is currently lacking.

FOOTNOTE

[1]. As the data of the DIF sample are partially clustered, the assumption of independence of observations is threatened. To avoid inferential errors, gender specific analyses were performed. However, the number of marriages or ex-marriages where both partners participated in the survey and both contacted the same health care providers is relatively small (40 couples in the sample of GPs' patients, 4 couples in the sample of psychiatrists' patients, and 10 couples in the sample of psychologists' patients). In addition, sensitivity analyses excluding coupled data have shown that this concern of biased estimators is not warranted.

TABLES

Table 1 : Characteristics of the Three Samples of Mental Health Care Users (Categorical Variables, %)

	GP (N = 817)		Psychiatrist (N = 205)		Psychologist (N = 251)	
	%	N	%	N	%	N
Dependent variables						
Subjective unmet need (% yes)	26.1	213	20.0	40	25.9	65
Frequency of health care use (% at least monthly use)	25.6	209	45.9	94	42.6	107
Independent variables						
Perceived unhelpfulness (% not really helped)	40.2	250	46.0	88	46.0	115
Gender						
Women	68.9	563	63.4	140	68.9	173
Men	31.1	254	26.6	75	31.1	78
Age						
24-39	22.5	184	21.5	44	27.1	68
40-49	43.5	355	37.6	77	49.4	124
50-64	34.0	278	41.0	84	23.5	59
Marital Status						
Married	17.9	146	15.6	32	19.9	50
Divorced, new partner	37.1	303	33.2	68	31.9	80
Divorced, single	45.0	368	51.2	405	48.2	121
Education						
Low	26.4	261	25.9	53	24.3	61
Middle	40.1	328	37.6	77	36.7	92
High	33.4	273	36.6	75	39.0	98
Equivalent household income						
EHI <50%	11.1	91	12.7	26	8.8	22
EHI 50-80%	26.7	218	31.2	64	27.9	70
EHI 80-120%	36.5	298	33.2	68	34.3	68
EHI >120%	19.6	160	14.6	30	23.9	60
EHI missing	6.1	50	8.3	17	5.2	13
Employment status						
Full-time work	45.7	373	29.8	61	45.8	115
Part-time work	25.0	204	17.1	35	23.1	58
Chronically ill	16.3	133	39.0	80	16.3	41
Unemployed	13.1	107	14.1	29	14.7	37

Table 2 : Characteristics of the Three Samples of Health Care Users (Metric Variables, Mean and Standard Deviation)

	GP (N = 817)		Psychiatrist (N = 205)		Psychologist (N = 251)	
	Mean	SD	Mean	SD	Mean	SD
Perceived helpfulness (0-4)	2.6	0.9	2.5	1.1	2.46	1.1
Depression (0-24)	7.6	5.2	8.7	5.6	8.48	5.6

Table 3: Correlates of Subjective Unmet Need Among Clients of Three Types of Health Care Providers

	GP (N = 816)				Psychiatrist (N = 205)				Psychologist (N = 251)			
			CI				CI				CI	
	O.R.	Sig.	Min.	Max.	O.R.	Sig.	Min.	Max.	O.R.	Sig.	Min.	Max.
Constant	0.184	**			0.183				0.210			
Perceived helpfulness	0.741	***	0.616	0.891	0.685	*	0.480	0.978	0.732	*	0.542	.996
Depression	1.120	***	1.084	1.159	1.070		0.997	1.149	1.140	***	1.074	1.211
Marital Status (Ref. cat. = married)												
Divorced, new partner	1.226		0.722	2.081	1.329		0.337	5.245	1.055		0.395	2.817
Divorced, no partner	1.825	*	1.080	3.083	2.133		0.577	7.887	1.377		0.536	3.536
Women	1.380		0.932	2.042	1.024		0.417	2.515	1.133		0.544	2.360
Age (Ref. cat. = 40-49)												
24-39	1.883	**	1.227	2.888	1.159		0.415	3.237	1.891		0.873	4.097
50-64	0.918		0.611	1.379	0.792		0.313	2.003	0.770		0.331	1.793
Educational level												
Low	1.086		0.700	1.685	0.599		0.214	1.676	0.429		0.172	1.069
High	1.226		0.819	1.835	0.599		0.228	1.569	0.985		0.467	2.079
EHI (Ref. cat. = +120% median)												
EHI <50%	0.575		0.284	1.164	2.594		0.469	14.320	1.455		0.395	5.363
EHI 50-80%	0.714		0.418	1.219	0.579		0.113	2.962	0.492		0.175	1.387
EHI 80-120%	0.620	*	0.385	0.998	1.668		0.398	6.992	0.844		0.353	2.016
EHI missing	0.776		0.354	1.701	2.617		0.462	14.833	0.679		0.134	3.435
Working situation (Ref. cat. = full-time work)												
Part-time work	0.776		0.498	1.208	1.230		0.312	4.843	0.988		0.422	2.316
Chronically ill	0.532	*	0.308	0.920	1.502		0.501	4.505	0.727		0.261	2.026
Unemployed	1.120		0.646	1.942	2.834		0.738	10.892	2.504		0.917	6.838
Nagelkerke R² (step 1)	15.2				21.7				19.9			
Nagelkerke R² (step 2)	16.8				24.5				21.9			
Log Likelihood (step 1)	848.3				175.0				250.6			
Log Likelihood (step 2)	838.2				170.6				246.6			

*p<0.05   ; **p<0.01; ***p<0.001

Table 4: Correlates of Frequency of Health Care Use Among Clients of Three Types of Health Care Providers

	GP (N = 816)				Psychiatrist (N = 205)				Psychologist (N = 251)			
			CI				CI				CI	
	O.R.	Sig.	Min.	Max.	O.R.	Sig.	Min.	Max.	O.R.	Sig.	Min.	Max.
Constant	0.004	***			0.022	***			0.046	**		
Perceived helpfulness	1.559	***	1.260	1.928	1.441	*	1.059	1.962	2.394	***	1.729	3.316
Depression	1.073	***	1.036	1.111	1.104	**	1.036	1.176	1.047		0.990	1.108
Marital Status (Ref. cat. = married)												
Divorced, new partner	2.773	***	1.524	5.046	1.754		0.638	4.826	1.099		0.473	2.708
Divorced, no partner	2.222	**	1.222	4.041	1.385		0.546	4.038	0.099		0.465	2.595
Women	1.283		0.862	1.909	1.673		0.828	3.378	0.471	*	0.242	0.918
Age (Ref. cat. = 40-49)												
24-39	1.028		0.638	1.656	1.331		0.58	3.054	1.087		0.532	2.224
50-64	1.331		0.889	1.993	0.543		0.263	1.121	1.931		0.898	4.154
Educational level												
Low	1.436		0.940	2.195	1.416		0.337	5.679	1.370		0.626	2.995
High	0.951		0.613	1.474	0.776		0.618	3.246	0.743		0.374	1.473
EHI (Ref. cat. = +120% median)												
EHI <50%	1.647		0.804	3.376	1.383		0.337	5.679	1.733		0.496	6.052
EHI 50-80%	1.553		0.847	2.844	2.125		0.703	6.417	1.299		0.532	3.171
EHI 80-120%	1.650		0.950	2.865	1.162		0.419	3.221	0.828		0.365	1.877
EHI missing	0.863		0.348	2.137	2.256		0.564	8.995	0.445		0.098	2.015
Working situation (Ref. cat. = full-time work)												
Part-time work	0.806		0.494	1.312	0.528		0.193	1.448	1.493		0.673	3.311
Chronically ill	4.372	***	2.700	7.081	1.397		0.200	2.022	2.590	*	1.031	6.51
Unemployed	1.653		0.948	2.882	0.636		0.616	3.17	1.095		0.434	2.764
Nagelkerke R² (step 1)	20.5				21.9				11.6			
Nagelkerke R² (step 2)	23.3				25.0				27.5			
Log Likelihood (step 1)	806.4				246.0				319.9			
Log Likelihood (step 2)	788.4				240.3				284.9			

*p<0.05   ; **p<0.01; ***p<0.001

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