Int J Public Health (2016) 61:495–504
DOI 10.1007/s00038-015-0782-8

ORIGINAL ARTICLE

Reluctance to seek professional help among suicidal people: results from the Swiss Health Survey

Michelle Dey · Anthony Francis Jorm

Received: 23 April 2015 / Revised: 5 October 2015 / Accepted: 28 December 2015 / Published online: 30 January 2016

Abstract
Objectives To investigate whether help-negation (not accepting or accessing available helping resources) among suicidal people can also be found in a Swiss sample.
Methods Data on 16,640 participants (aged 15 and older) from the Swiss Health Survey 2012 was analyzed. Logistic regression analyses were conducted to study the association between suicidality (categorized into "not at all"; "several days"; and "more than half of the days") and currently being in treatment for depression (covariates: depression and socio-demographic variables).
Results Less than 1/3 of the participants with the highest level of suicidality were currently in treatment (males: 27.0 %; females: 29.6 %). Participants who were experiencing suicidality for several days were more likely to be in treatment relative to non-suicidal people. However, people with the highest level of suicidality did not differ from the other two groups in regard to treatment frequency. Help-negation was particularly pronounced among males and young people (15–24-year olds).
Conclusions The reluctance to seek professional help is problematic because treatment might reduce the risk of suicide.

Keywords Help-negation · Suicidality · Depression · Treatment · Swiss Health Survey

M. Dey (✉) · A. F. Jorm
Population Mental Health Group, Centre for Mental Health, Melbourne School of Population and Global Health, University of Melbourne, 207 Bouverie Street, Melbourne, VIC 3010, Australia
e-mail: michelle.dey@unimelb.edu.au

Introduction

Suicide is a major public health concern in many countries (Nock et al. 2008; OECD 2013; WHO 2014), including Switzerland (FOPH 2005; SFSO 2014). Suicide attempts are also of importance, especially because they are a risk factor for later suicide completion (Yoshimasu et al. 2008). Mental health problems significantly contribute to the prediction of suicide (attempts) as well (Nock et al. 2008; Yoshimasu et al. 2008). Hence, it can be assumed that some suicides and suicide attempts might be prevented by timely and continuing therapeutic interventions (Mann et al. 2005). However, several studies have shown help-negation among suicidal people, that is a "refusal to accept or access available helping resources" (Rudd et al. 1995, p. 499). Cognitively, this help-negation was expressed by an inverse relationship between self-reported levels of suicidal ideation or mental health problems and intentions to seek formal help (Carlton and Deane 2000; Deane et al. 2001; Wilson and Deane 2010; Wilson et al. 2005, 2010; Yakunina et al. 2010).

Some confirming findings for help-negation have also been found in studies that looked at actual behavior rather than help-seeking intentions. Low rates of formal help-seeking among suicidal people (Borges et al. 2010; Husky et al. 2012; Johnston et al. 2009; Pirkis et al. 2003; Wu et al. 2010) or among people with significant mental health problems (Burgess et al. 2009; Essau 2005; Wang et al. 2007; Zachrisson et al. 2006) indicate that those who might need help are not accepting or accessing available resources. By contrast, other studies about actual help-seeking behavior have not found an inverse association between levels of suicidality or mental health problems and help-seeking (Borges et al. 2010; Burgess et al. 2009; Husky et al. 2012; Johnston et al. 2009; Pirkis et al. 2003; Wang et al. 2007; Zachrisson et al. 2006).

Despite the growing literature about help-negation, it must be considered that many studies only looked at help-seeking intentions, rather than at actual utilization of health services. Furthermore, most investigations have only included adolescents or young adults and were conducted in English-speaking countries. Lastly, only a limited number of studies included suicidality and depression (or similar indicators) as predictors for help-seeking (intentions) (Carlton and Deane 2000; Pirkis et al. 2003; Wilson and Deane 2010; Wilson et al. 2005, 2010), even though both factors are likely to co-occur. Only by simultaneously considering both predictors would it be possible to get insights into which factor (if not both) contributes to help-negation.

The aim of the current study was to examine whether help-negation can also be found in a Swiss sample covering a broad age range. Suicidality and depression were used as predictors of currently being in treatment. Since previous studies have shown gender differences in suicidality (Nock et al. 2008; OECD 2011; WHO 2014) as well as in help-seeking attitudes and behavior (Mackenzie et al. 2006; Nam et al. 2010), analyses were conducted separately for males and females.

Methods

Procedure

Data from the Swiss Health Survey (SHS) from 2012 was used, which was conducted by the Swiss Federal Statistical Office (SFSO). The methods are described in detail elsewhere (SFSO 2013). Briefly, a stratified random sample of the permanent Swiss population aged 15 and older and living in private households was used. People living in penal institutions, hospitals, homes for the elderly or other collective households, as well as people seeking asylum, were excluded. Generally, the first phase of the survey consisted of computer-assisted telephone interviews (CATI). However, under certain circumstances, a computer-aided personal interview (CAPI) was carried out (e.g., if a health problem made it impossible for the person to participate in the CATI). Lastly, proxy-interviews were used if neither CATI nor CAPI could be conducted. Altogether, 21,597 people participated in this first phase of the survey (response rate = 53.1 %). Those people who had taken part in the CATI ($n = 20{,}830$) or CAPI ($n = 48$) were also invited to participate in the second part of the survey, which consisted of a written questionnaire. The response rate at this phase was 87.9 % ($n = 18{,}357$; the 719 proxies are not included in the denominator, because they were not invited to participate in the second phase of the survey). Interviews and questionnaire were conducted or filled out in German, French or Italian. The survey was conducted in accordance to ethical standards.

Predictors

- Depression and suicidality: The validated nine-item Patient Health Questionnaire (PHQ-9; Kroenke and Spitzer 2002; Kroenke et al. 2001) was used as part of the written questionnaire. It asks about the frequency of the following symptoms of depressive disorders: (1) anhedonia (defined in the questionnaire as experiencing only little interest/pleasure in doing things); (2) depressed mood; (3) change in sleep (e.g., trouble falling asleep); (4) fatigue or loss of energy; (5) poor appetite or overeating; (6) guilt/worthlessness; (7) trouble concentrating; (8) change in activity (either moving or speaking very slowly or being fidgety or restless); and (9) suicidality. The questions refer to the last 2 weeks and are answered on a 4-point scale, ranging from "never" (coded as 0) to "nearly every day" (coded as 3). For the purpose of the current article, we considered (1) a sum-score, which includes the first eight items of the PHQ-9 (i.e., excluding the item about suicidality), ranging from 0 to 24 (Cronbach's alpha of the first eight items = 0.84); and (2) the item about suicidality (the exact wording of the item was as follows: "Thoughts that you would be better off dead or of hurting yourself in some way"). Due to the relatively low numbers of people who indicated that they were experiencing suicidality "more than half the days" and "nearly every day" these two categories were grouped together (subsequently labeled as "more than half the days").
- Language region: German-, French- and Italian-speaking;
- Gender: males vs. females;
- Age categories: seven age groups were used: 15–24, 25–34, 35–44, 45–54, 55–64, 65–74 and 75+;
- Education: the highest achieved education of the participant was categorized into "mandatory", "secondary" or "tertiary". People with mandatory education consisted of people who had finished mandatory school (about 4/5) as well as people who had not (yet) finished mandatory school (including the youngest participants who were still in school);
- In education: people were coded as being "in education" (e.g., students or people who attend further vocational training) vs. "not being in education";
- Martial status: the following four categories were used: "single/unmarried" (including people who were de-facto), "married" (including registered partnership), "separated/divorced" (including annulled register partnership); and "widowed";

- Nationality: Swiss (including people with dual citizenship who were also Swiss) vs. Non-Swiss.

Outcome

In the written questionnaire (second phase of the survey), participants were asked whether they currently are or previously were in medical treatment for depression. Four answer categories were provided, namely (1) "yes, currently in treatment"; (2) "yes, in treatment within the last 12 months"; (3) "yes, in treatment previous to the last 12 months"; and (4) "no". For the current article, the answers were dichotomized into "currently not in treatment" (coded as 0; answer categories 2, 3 and 4) vs. "currently in treatment" (coded as 1; answer categories 1).

Statistical analysis

Weights provided by the SFSO were used for all analyses (for details about the weights: SFSO 2013). All analyses were carried out with Stata (StataCorp 2013). Descriptive statistics were provided to display socio-demographic characteristics of the sample. Chi-square analyses were conducted to assess associations between socio-demographic variables and suicidality. If the Chi-square test revealed a significant result, post hoc tests (adjusted for multiple comparisons) were used to elaborate where exactly differences occurred. Logistic regression analyses were carried out to identify predictors (see above) that were associated with currently being in medical treatment for depression. For categorical predictors with more than two levels, the Wald test was used (assesses if the levels of a variable jointly differ from zero). If the Wald test revealed a significant result, post hoc tests (Bonferroni-adjusted for multiple comparisons) were carried out to elaborate what levels differed from each other. Logistic regression analyses without Wald test were used for dichotomous variables and continuous variables. Crude odds ratios (ORs) as well as adjusted ORs (AORs) were calculated. In a first set of adjusted analyses, socio-demographic variables and suicidality were included. In a second set of adjusted analyses, all predictors (including depression) were included concurrently. All variance inflation factors were $\leq$10, indicating that multicollinearity was not a concern in the present study (Myers 1990).

Analytical sample

As mentioned above, some variables were gathered as part of the second phase of the survey. Of the total of 18,357 people who filled out the written questionnaire, 1717 were excluded due to missing data in any of the variables used here. Hence, the final analytical sample consisted of 16,640 people.

Results

Sociodemographic characteristics and their association with suicidality

Socio-demographic characteristics of the sample are described in Table 1 (see first column). Furthermore, associations between socio-demographic variables and suicidality are presented. Regarding language region, a lower percentage of French- than German-speaking participants reported suicidality with a frequency of "several days" during the last 2 weeks. No significant differences were found between females and males. By contrast, age was significantly associated with suicidality. Post hoc tests revealed that fewer participants of the age group 15–24 years (91.7 %) reported that they had not at all experienced suicidality during the past 2 weeks relative to the age groups 35–44 years (95.0 %) and 65–75 years (95.4 %). In contrast, more people in the youngest age group (15–24 years) reported that they had experienced suicidality more than half of the days (2.3 %) relative to those aged 55–64 (0.7 %), 65–74 (0.3 %) and 75+ years (0.3 %). A number of associations with education were found, the most notable of which were that people with tertiary education were more likely (vs. lower education) to have reported experiencing suicidality several days during the last 2 weeks, whereas more people with mandatory education (vs. higher education) mentioned that they were experiencing suicidality more than half of the days. Regarding marital status, fewer married people were suicidal several days during the past 2 weeks relative to those who were "single/unmarried" or "separated/divorced". Experiencing suicidality more than half of the days was less common among widows relative to all other groups. However, this finding must be interpreted with caution, because only two widows mentioned that they were suicidal more than half the days. Lastly, a higher percentage of non-Swiss versus Swiss participants mentioned, that they were experiencing suicidality more than half the days.

Treatment for depression

In the unadjusted analyses, the likelihood of being in treatment was higher for males and females who were suicidal several days or more than half the days vs. those who were not suicidal (Table 2). After adjusting for socio-demographic variables, the likelihood of being in treatment increased with increasing levels of suicidality (not suicidal at all <suicidal several days <suicidal more than half the

Table 1 Socio-demographic characteristics and their association with suicidality in the Swiss Health Survey 2012, Switzerland 2012

	Total sample	Suicidality during the last 2 weeks			p value χ^2
		Not at all	Several days	More than half the days	
	n % (95 % CI)	*n* % (95 % CI)	*n* % (95 % CI)	*n* % (95 % CI)	
Total sample *n* (%)	16,640	15,664	829	147	
	100	93.9 (93.4–94.4)	5.2 (4.7–5.6)	0.9 (0.8–1.2)	
Language region					
German	11,173	10,498	595	80	.010
	72.2 (71.4–73.0)	93.7 (93.1–94.3)[a]	5.4 (4.9–6.0)[a]	0.8 (0.6–1.1)[a]	
French	4272	4052	172	48	
	23.5 (22.7–24.3)	94.7 (93.8–95.5)[a]	4.2 (3.4–5.0)[b]	1.1 (0.8–1.6)[a]	
Italian	1195	1114	62	19	
	4.3 (4.1–4.6)	92.6 (90.5–94.2)[a]	5.8 (4.3–7.7)[a,b]	1.7 (1.0–2.7)[a]	
Gender					
Male	8018	7566	376	76	.580
	50.5 (49.5–51.5)	94.1 (93.4–94.8)	4.9 (4.3–5.6)	0.9 (0.7–1.2)	
Female	8622	8098	453	71	
	49.5 (48.5–50.5)	93.6 (92.9–94.3)	5.4 (4.8–6.0)	1.0 (0.7–1.3)	
Age categories					
15–24	2255	2081	133	41	<.001
	13.8 (13.1–14.5)	91.7 (90.0–93.1)[a]	6.2 (5.0–7.7)[a]	2.1 (1.4–3.1)[a]	
25–34	2097	1990	88	19	
	16.7 (15.8–17.5)	93.6 (92.0–94.9)[a,b]	5.3 (4.1–6.9)[a]	1.1 (0.6–1.8)[a,b]	
35–44	2942	2790	127	25	
	17.7 (17.0–18.5)	95.0 (93.9–95.9)[b]	4.2 (3.4–5.3)[a]	0.8 (0.5–1.3)[a,b]	
45–54	3548	3326	191	31	
	19.8 (19.1–20.6)	94.1 (93.0–95.0)[a,b]	5.0 (4.2–6.0)[a]	0.9 (0.6–1.4)[a,b]	
55–64	2560	2398	141	21	
	13.8 (13.2–14.5)	93.2 (91.7–94.4)[a,b]	6.1 (4.9–7.6)[a]	0.7 (0.4–1.2)[b]	
65–74	2124	2026	94	4	
	10.5 (9.9–11.0)	95.4 (94.1–96.4)[b]	4.4 (3.4–5.6)[a]	0.3 (0.1–0.7)[b]	
75+	1114	1053	55	6	
	7.7 (7.1–8.3)	95.0 (93.0–96.4)[a,b]	4.7 (3.3–6.6)[a]	0.3 (0.1–0.8)[b]	
Education					
Mandatory	2265	2075	150	40	<.001
	15.1 (14.3–15.8)	90.9 (89.1–92.4)[a]	7.3 (5.9–8.9)[a]	1.8 (1.2–2.7)[a]	
Secondary	9112	8574	458	80	
	53.7 (52.7–54.7)	93.8 (93.1–94.4)[b]	5.3 (4.7–6.0)[a]	0.9 (0.7–1.2)[b]	
Tertiary	5263	5015	221	27	
	31.3 (30.4–32.2)	95.6 (94.8–96.2)[c]	3.8 (3.3–4.5)[b]	0.6 (0.4–1.0)[b]	
(Still) in education					
No	14,948	14,094	731	123	.009
	89.5 (88.9–90.1)	94.1 (93.6–94.6)[a]	5.0 (4.6–5.5)[a]	0.9 (0.7–1.1)[a]	
Yes	1692	1570	98	24	
	10.5 (9.9–11.1)	92.0 (90.1–93.5)[b]	6.3 (5.0–8.0)[a]	1.7 (1.0–2.7)[a]	

Table 1 continued

	Total sample	Suicidality during the last 2 weeks			p value χ^2
		Not at all	Several days	More than half the days	
	n % (95 % CI)	n % (95 % CI)	n % (95 % CI)	n % (95 % CI)	
Marital status					
Single/unmarried	5014	4670	279	65	<.001
	33.2 (32.2–34.2)	92.7 (91.6–93.6)[a]	6.0 (5.1–7.0)[a]	1.3 (1.0–1.8)[a]	
Married	9303	8850	393	60	
	51.5 (50.5–52.5)	95.1 (94.5–95.7)[b]	4.1 (3.6–4.6)[b]	0.8 (0.6–1.1)[a]	
Separated/divorced	1569	1433	116	20	
	10.3 (9.7–11.0)	91.7 (89.8–93.3)[a]	7.5 (6.0–9.3)[a]	0.8 (0.5–1.3)[a]	
Widowed	754	711	41	2	
	5.0 (4.5–5.5)	93.8 (90.8–95.8)[a,b]	6.1 (4.0–9.1)[a,b]	0.1 (0–0.5)[b]	
Nationality					
Swiss	14,265	13,445	711	109	.002
	77.3 (76.3–78.3)	94.1 (93.6–94.6)[a]	5.1 (4.7–5.6)[a]	0.7 (0.6–0.9)[a]	
Non-Swiss	2375	2219	118	38	
	22.7 (21.7–23.7)	93.1 (91.7–94.3)[a]	5.2 (4.2–6.5)[a]	1.7 (1.2–2.4)[b]	

Data is weighted; 95 % CI = 95 % confidence interval; if the χ^2 test revealed a significant result, post hoc tests were conducted to evaluate where exactly the groups differed. Groups with an identical superscript did not differ. Groups with no identical superscript significantly differed. p values were adjusted for multiple comparisons

days). Only one comparison remained significant when additionally adjusting for depression: males and females who were suicidal several days were more likely to be in treatment relative to those who were not suicidal. People with the highest suicidality levels no longer differed from the other groups. People who were suicidal 'more than half the days' even seemed to be slightly (not significantly) less likely to be in treatment relative to those who were suicidal 'several days', an effect that seemed to be more pronounced among males (AOR for this comparison = 0.47) than females (AOR = 0.87). Less than 1/3 of the participants with the highest suicidality level were currently in medical treatment for depression (males: 27.0 %; females: 29.6 %). Both in the unadjusted and in the adjusted analyses, depression was positively associated with the outcome in males and females. In the unadjusted and adjusted analyses, Italian- vs. German-speaking men were more likely to currently be in treatment for depression. Many comparisons between age categories were significant. In the final model (including all predictors), males of the youngest age group (15–24 years) were less likely to be in treatment relative to all age categories between 25 and 74 years. Furthermore, 75+-year olds were less likely to be in treatment than the age groups '45–54' and '55–64'. The results for females were similar insofar that the youngest age group (15–24 years) seemed to be less likely to be in treatment relative to middle-aged people (age categories between 35 and 64 years). Men with the highest level of education (tertiary) were, relative to those with mandatory education, less likely to be in treatment (only significant when adjusting for socio-demographic variables). Furthermore, men who were still in education were, relative to those who were not, more likely to be in treatment (in both adjusted analyses). In the model that included all predictors, women who were separated or divorced were more likely to be in treatment. Lastly, non-Swiss females were, relative to Swiss females, less likely of being in treatment (in both adjusted analyses).

Discussion

The present study analyzed data from the Swiss Health Survey 2012 and found some evidence for help-negation among suicidal participants (aged 15–75+). In particular, less than 1/3 of the participants with the most severe levels of suicidality were currently in medical treatment for depression. It is possible that people who were experiencing such high levels of suicidality had either never sought professional help or had discontinued treatment. Not accepting or accessing available helping resources might have been due to the affected person's doubt about the efficacy of treatment (Rudd et al. 1995), maladaptive coping strategies of suicidal people (Gould et al. 2004; Rudd et al. 1995), negative attitudes towards or beliefs about seeking professional help (Carlton and Deane 2000;

Table 2 Logistic regression models of the association between suicidality and currently being in medical treatment for depression in the Swiss Health Survey 2012, Switzerland 2012

	Currently being in treatment for depression			
	In treatment % or mean (95 % CI)	Crude OR (95 % CI)[b]	AOR (95 % CI)[b] (adjusted for socio-demographic variables)	AOR (95 % CI)[b] (adjusted for all predictors)
Males				
Total male sample	1.8 (1.5–2.2)			
Suicidality[a]				
(1) Not at all: %	1.1 (0.9–1.5)	1 (ref) vs. 2: 10.26 (5.96–17.65)***	1 (ref) vs. 2: 10 (5.63–17.76)***	1 (ref) vs. 2: 2.30 (1.12–4.75)*
(2) Several days: %	10.5 (7.5–14.5)	1 (ref) vs. 3: 32.33 (13.01–80.38)***	1 (ref) vs. 3: 37.11 (14.41–95.55)***	1 (ref) vs. 3: 1.07 (0.28–4.05)
(3) More than half the days: %	27.0 (15.5–42.7)	2 (ref) vs. 3: 3.15 (1.20–8.27)*	2 (ref) vs. 3: 3.71 (1.33–10.40)**	2 (ref) vs. 3: 0.47 (0.13–1.73)
Depression: mean	10.0 (8.68–11.31)	1.31 (1.27–1.36)***	Not included in the model	1.31 (1.25–1.37)***
Language region[a]				
(1) German: %	1.5 (1.2–2.0)	1 (ref) vs. 3: 2.83 (1.38–5.79)**	1 (ref) vs. 3: 2.70 (1.22–5.96)**	1 (ref) vs. 3: 2.50 (1.09–5.74)*
(2) French: %	2.3 (1.6–3.3)			
(3) Italian: %	4.2 (2.6–7.0)			
Age[a]				
(1) 15–24: %	0.4 (0.1–0.9)	1 (ref) vs. 3: 5.97 (1.20–29.62)*	1 (ref) vs. 3: 24.14 (2.13–274.06)***	1 (ref) vs. 2: 13.20 (1.18–147.84)*
(2) 25–34: %	1.4 (0.7–2.6)	1 (ref) vs. 4: 8.69 (1.91–39.50)***	1 (ref) vs. 4: 34.90 (2.80–435.54)***	1 (ref) vs. 3: 25.05 (1.99–315.75)**
(3) 35–44: %	2.1 (1.3–3.3)	1 (ref) vs. 5: 9.42 (2.03–43.73)***	1 (ref) vs. 5: 35.36 (2.84–439.49)***	1 (ref) vs. 4: 49.06 (3.58–672.20)***
(4) 45–54: %	3.0 (2.2–4.1)	3 (ref) vs 7: 0.08 (0.01–0.79)*	1 (ref) vs. 6: 13.75 (1.00–188.48)*	1 (ref) vs. 5: 57.10 (4.04–806.30)***
(5) 55–64: %	3.2 (2.3–4.6)	4 (ref) vs.6: 0.36 (0.13–1.00)*	3 (ref) vs. 7: 0.08 (0.01–0.87)*	1 (ref) vs. 6: 28.49 (1.86–437.55)**
(6) 65–74: %	1.1 (0.6–1.9)	4 (ref) vs. 7: 0.06 (0.01–0.51)**	4 (ref) vs. 7: 0.06 (0.01–0.58)**	4 (ref) vs. 7: 0.07 (0.00–0.99)*
(7) 75+: %	0.2 (0–0.7)	5 (ref) vs. 6: 0.33 (0.11–0.95)*	5 (ref) vs. 7: 0.05 (0.01–0.57)**	5 (ref) vs. 7: 0.06 (0.00–0.86)*
		5 (ref) vs. 7: 0.05 (0.01–0.48)***		
Education[a]				
(1) Mandatory: %	2.3 (1.4–3.7)	No post hoc tests	1 (ref) vs. 3: 0.42 (0.19–0.94)*	No post hoc tests
(2) Secondary: %	2.1 (1.6–2.8)			
(3) Tertiary: %	1.3 (0.9–1.8)			
(Still) in education				
(1) No: %	1.9 (1.5–2.3)	Comparison is not significant	1 (ref) vs. 2: 3.14 (1.14–8.66)*	1 (ref) vs. 2: 3.88 (1.32–11.41)*
(2) Yes: %	1.6 (0.8–3.4)			
Marital status[a]				
(1) Single/unmarried: %	1.4 (0.9–2.1)	No post hoc tests	No post hoc tests	No post hoc tests
(2) Married: %	2.0 (1.6–2.5)			
(3) Separated/divorced: %	3.2 (1.9–5.4)			
(4) Widowed: %	0.7 (0.1–4.9)			

Table 2 continued

	Currently being in treatment for depression			
	In treatment % or mean (95 % CI)	Crude OR (95 % CI)[b]	AOR (95 % CI)[b] (adjusted for socio-demographic variables)	AOR (95 % CI)[b] (adjusted for all predictors)
Nationality				
(1) Swiss: %	1.7 (1.4–2.1)	Comparison is not significant	Comparison is not significant	Comparison is not significant
(2) Non-Swiss: %	2.1 (1.4–3.2)			
Females				
Total female sample	3.3 (2.8–3.8)			
Suicidality[a]				
(1) Not at all: %	2.2 (1.8–2.6)	1 (ref) vs. 2: 9.59 (6.29–14.62)***	1 (ref) vs. 2: 9.79 (6.44–14.88)***	1 (ref) vs. 2: 2.70 (1.59–4.56)***
(2) Several days: %	17.5 (13.7–22.2)	1 (ref) vs. 3: 18.93 (8.13–44.08)***	1 (ref) vs. 3: 27.07 (10.49–69.86)***	1 (ref) vs. 3: 2.36 (0.63–8.76)
(3) More than half the days: %	29.6 (17.7–45.0)	2 (ref) vs. 3: 1.97 (0.81–4.82)	2 (ref) vs. 3: 2.77 (1.02–7.53)*	2 (ref) vs. 3: 0.87 (0.23–3.25)
Depression: mean	9.48 (8.61–10.35)	1.29 (1.25–1.33)***	Not included in the model	1.27 (1.22–1.32)***
Language region[a]				
(1) German: %	3.2 (2.7–3.8)	No post hoc tests	No post hoc tests	No post hoc tests
(2) French: %	3.4 (2.7–4.4)			
(3) Italian: %	3.2 (2.0–5.2)			
Age[a]				
(1) 15–24: %	1.8 (0.9–3.2)	4 (ref) vs. 6: 0.40 (0.18–0.92)*	1 (ref) vs. 2: 3.22 (1.02–10.17)*	1 vs. 3: 4.07 (1.04–15.98)*
(2) 25–34: %	3.3 (2.1–5.0)		1 (ref) vs. 3: 3.88 (1.11–13.50)*	1 vs. 4: 4.62 (1.21–17.65)*
(3) 35–44: %	3.7 (2.7–5.0)		1 (ref) vs. 4: 4.47 (1.31–15.30)**	1 vs. 5: 4.56 (1.11–18.75)*
(4) 45–54: %	4.7 (3.7–6.0)			
(5) 55–64: %	3.8 (2.8–5.2)			
(6) 65–74: %	1.9 (1.2–3.0)			
(7) 75+: %	2.4 (1.4–4.1)			
Education[a]				
(1) Mandatory: %	3.1 (2.1–4.5)	No post hoc tests	No post hoc tests	No post hoc tests
(2) Secondary: %	3.3 (2.8–3.9)			
(3) Tertiary: %	3.3 (2.5–4.4)			
(Still) in education				
(1) No: %	3.4 (2.9–3.9)	Comparison is not significant	Comparison is not significant	Comparison is not significant
(2) Yes: %	2.4 (1.3–4.3)			
Marital status[a]				
(1) Single/unmarried: %	3.1 (2.3–4.1)	1 (ref) vs. 3: 2.36 (1.35–4.13)***	2 (ref) vs. 3: 2.41 (1.40–4.16)***	2 (ref) vs. 3: 2.12 (1.18–3.83)**
(2) Married: %	2.6 (2.1–3.2)	2 (ref) vs. 3: 2.81 (1.71–4.61)***	3 (ref) vs. 4: 0.36 (0.13–0.99)*	
(3) Separated/divorced: %	7.0 (5.3–9.2)	3 (ref) vs. 4: 0.29 (0.12–0.69)***		
(4) Widowed: %	2.1 (1.2–3.7)			

Table 2 continued

	Currently being in treatment for depression			
	In treatment % or mean (95 % CI)	Crude OR (95 % CI)[b]	AOR (95 % CI)[b] (adjusted for socio-demographic variables)	AOR (95 % CI)[b] (adjusted for all predictors)
Nationality				
(1) Swiss: %	3.4 (3.0–4.0)	Comparison is not significant	1 (ref) vs. 2: 0.63 (0.39–0.99)*	1 (ref) vs. 2: 0.57 (0.35–0.93)*
(2) Non-Swiss: %	2.6 (1.7–3.9)			

Data is weighted

OR odds ratio, *AOR* adjusted odds ratio

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

[a] Wald test was conducted for categorical variables with more than two levels; if the Wald test revealed a significant result, post hoc tests (Bonferroni-adjusted for multiple comparisons) were conducted

[b] Only significant results are reported (except for the main predictor of interest: suicidality)

Wilson 2010) or stigma associated with suicidality (Sudak et al. 2008). Low utilization of professional health services among suicidal people has also been described in earlier studies (Borges et al. 2010; Husky et al. 2012; Johnston et al. 2009; Pirkis et al. 2003; Wu et al. 2010).

Another indication of help-negation was found when adjusting for all predictors. Relative to those who were not suicidal, people who experienced suicidality several days during the past 2 weeks were more likely to be in treatment. However, those with the highest suicidality level did not differ from the other two groups in regard to treatment frequency. That using health services does not increase continuously with increasing levels of suicidality has also been described by others (Borges et al. 2010; Husky et al. 2012). Regarding these findings, it must be emphasized that help-negation among suicidal people only became obvious in the adjusted analyses where depression was included as additional predictor. In particular, the unadjusted analyses, as well as the adjusted analyses that only included socio-demographic variables, showed positive associations between suicidality or depression and currently being in treatment (comparable to Pirkis et al. 2003). Including suicidality and depression in the regression model led to a considerable reduction in the AOR of suicidality, and the likelihood of currently being in treatment was lower for people with the highest suicidality level relative to those who reported experiencing suicidality several days. That depression was also a significant predictor was possibly due to the outcome, which specifically asked the person if he/she was currently in treatment because of having depression.

In the present study, help-negation seemed to be particularly pronounced among males. Males with the highest suicidality level were slightly less likely to be in treatment relative to those who were experiencing suicidality several days (AOR of the model that included depression = 0.47). The same pattern was found for females, although the AOR was closer to 1 (0.87). In other words, males were not only (slightly) less likely to be in treatment than females regardless of their status of suicidality, but also to become more reluctant to seek help when suicidality levels increase. It is possible that the higher help-negation among males contributes to their higher suicide rate, which has been described for Switzerland (FOPH 2005) and other countries (Nock et al. 2008; OECD 2013; WHO 2014). Possibly, help-negation is more pronounced among men because factors that generally work as barriers to using mental health services become even more distinct when suicidality levels increase. For instance, males, particularly those with the highest need, might have been less likely to have visited a mental health professional because they were, relative to females, less open to seeking help and to acknowledging the presence of a mental health problem

(Mackenzie et al. 2006). Furthermore, that males feel more forced to react stoically and independently to mental health symptoms (MacLean et al. 2010) might also have contributed to the finding.

Besides men, the youngest age group (15–24 years) showed low rates of treatment compared to the other age groups, despite their relatively high levels of sucidality. Low utilization rates among adolescents and young adults were possibly due to their higher dependence on others (Wang et al. 2007). That people who were still in education also seemed to be suicidal more often compared to people who were not, might have been due to the younger age of the former group.

Despite some evidence for help-negation in the present study (particularly among men and young people), there were also some contradictory findings. First, people who were suicidal several days were significantly more likely to currently be in treatment relative to non-suicidal people (as indicated by AOR >1). Second, depression was positively associated with being in treatment. These two findings are in line with other studies that looked at actual behavior (Borges et al. 2010; Burgess et al. 2009; Husky et al. 2012; Johnston et al. 2009; Pirkis et al. 2003; Wang et al. 2007; Zachrisson et al. 2006), but contradict the investigations that described a negative association between levels of suicidality or mental health problems and intentions to seek professional help (Carlton and Deane 2000; Deane et al. 2001; Wilson and Deane 2010; Wilson et al. 2005, 2010; Yakunina et al. 2010). Hence, it can be assumed that help-negation stands out more clearly in studies that look at help-seeking intentions, rather than actual help-seeking behavior. One possible reason for this discrepancy is that studies about actual behavior generally ask questions about mental health (including suicidality) and utilization of mental health services that refer to an identical or similar time frame (e.g., the previous 12 months; or as in the present study to the current situation or recent past). In contrast, studies about help-seeking intentions often use an indicator of suicidal ideation that refers to the previous months to predict intentions to seek help (i.e., behavior that lies in the future). Furthermore, actual behavior might be affected to a stronger degree by the social environment (e.g., family members, friends or the partner might have motivated the suicidal person to seek professional help) than intentions to seek help.

Limitations

Despite the strength of the current study (e.g., looking at actual help-seeking behavior; covering a broad age range; large sample size), it must be considered that the outcome used here asked whether the person was currently in medical treatment for depression. Using this variable, it cannot be answered whether people who became suicidal never sought help or discontinued treatment prematurely. Furthermore, the outcome is limited because it only refers to medical treatment. Participants might not have answered affirmatively when they had sought other professional help, such as from a psychologist. It must also be taken into account that some participants might have sought treatment for other reasons than depression. For instance, people might have been in treatment because of their substance misuse, which might also have been related to suicidality (Nock et al. 2008; Yoshimasu et al. 2008). Beside the limitations associated with the outcome measurement, it must also be acknowledged that other predictors, which might have been relevant for the demonstrated help-negation effect (e.g., attitudes and beliefs about help-seeking; Wilson et al. 2005) were not collected in the SHS.

Conclusion

The present article revealed that many suicidal people living in Switzerland are reluctant to accept or access professional help. This is particularly problematic since non-fatal suicidal behavior can be a precursor of suicide completion (Yoshimasu et al. 2008), a progression that might be prevented by timely and continuing therapeutical interventions (Mann et al. 2005). Hence, people with the highest level of suicidality should be convinced about the importance of getting professional help. Starting points for such interventions should be factors which might contribute to help-negation, such as negative attitudes towards and beliefs about help-seeking (Wilson et al. 2005). In this regard, some socio-demographic subgroups deserve special attention. First, men seemed to show a more pronounced help negation when their need for treatment increased, which might contribute to their higher suicide rates (FOPH 2005; Nock et al. 2008; OECD 2013; WHO 2014). Second, adolescents and young adults (15–24-year olds) seemed to be prone to experiencing suicidality and also be reluctant to seek professional help. The present study also indicates that subsequent studies should concurrently include suicidality and depression as predictors for professional help-seeking. Both factors are likely to co-occur and help-negation among suicidal people seemed to become more pronounced when depression was included as additional predictor.

Acknowledgments We would like to thank the Swiss Federal Statistical Office for providing the data and information about suicide rates, Marilina Galati-Petrecca for answering questions in regard to the survey and Stefan Cvetkovski for his methodological input. Michelle Dey is supported by a fellowship (P2ZHP1_148710) from the Swiss National Science Foundation.

References

Borges G, Benjet C, Medina-Mora ME et al (2010) Service use among Mexico city adolescents with suicidality. J Affect Disord 120(1–3):32–39. doi:10.1016/j.jad.2009.04.008

Burgess PM, Pirkis JE, Slade TN et al (2009) Service use for mental health problems: findings from the 2007 National Survey of Mental Health and Wellbeing. Aust N Z J Psychiatry 43(7):615–623. doi:10.1080/00048670902970858

Carlton PA, Deane FP (2000) Impact of attitudes and suicidal ideation on adolescents' intentions to seek professional psychological help. J Adolesc 23(1):35–45. doi:10.1006/jado.1999.0299

Deane FP, Wilson CJ, Ciarrochi J (2001) Suicidal ideation and help-negation: not just hopelessness or prior help. J Clin Psychol 57(7):901–914. doi:10.1002/jclp.1058.abs

Essau CA (2005) Frequency and patterns of mental health services utilization among adolescents with anxiety and depressive disorders. Depress Anxiety 22(3):130–137. doi:10.1002/Da.20115

FOPH (2005) Suizid und Suizidprävention in der Schweiz Bericht in Erfüllung des Postulates Widmer (02.3251)

Gould MS, Velting D, Kleinman M et al (2004) Teenagers' attitudes about coping strategies and help-seeking behavior for suicidality. J Am Acad Child Adolesc Psychiatry 43(9):1124–1133. doi:10.1097/01.chi.0000132811.06547.31

Husky MM, Olfson M, He JP et al (2012) Twelve-month suicidal symptoms and use of services among adolescents: results from the National Comorbidity Survey. Psychiatr Serv 63(10):989–996. doi:10.1176/appi.ps.201200058

Johnston AK, Pirkis JE, Burgess PM (2009) Suicidal thoughts and behaviours among Australian adults: findings from the 2007 National Survey of Mental Health and Wellbeing. Aust N Z J Psychiatry 43(7):635–643. doi:10.1080/00048670902970874

Kroenke K, Spitzer RL (2002) The PHQ-9: a new depression diagnostic and severity measure. Psychiatr Ann 32(9):509–515

Kroenke K, Spitzer RL, Williams JB (2001) The PHQ-9: validity of a brief depression severity measure. J Gen Intern Med 16(9):606–613

Mackenzie CS, Gekoski WL, Knox VJ (2006) Age, gender, and the underutilization of mental health services: the influence of help-seeking attitudes. Aging Ment Health 10(6):574–582. doi:10.1080/13607860600641200

MacLean A, Sweeting H, Hunt K (2010) 'Rules' for boys, 'guidelines' for girls: gender differences in symptom reporting during childhood and adolescence. Soc Sci Med 70(4):597–604. doi:10.1016/j.socscimed.2009.10.042

Mann JJ, Apter A, Bertolote J et al (2005) Suicide prevention strategies—a systematic review. JAMA 294(16):2064–2074. doi:10.1001/jama.294.16.2064

Myers R (1990) Classical and modern regression with applications, 2nd edn. Duxbury, Boston

Nam SK, Chu HJ, Lee MK et al (2010) A meta-analysis of gender differences in attitudes toward seeking professional psychological help. J Am Coll Health 59(2):110–116

Nock MK, Borges G, Bromet EJ et al (2008) Suicide and suicidal behavior. Epidemiol Rev 30(1):133–154. doi:10.1093/epirev/mxn002

OECD (2011) Suicide health at a glance 2011: OECD Indicators. OECD Publishing

OECD (2013) Suicide health at a glance 2013: OECD Indicators. OECD Publishing

Pirkis JE, Irwin CE, Brindis CD et al. (2003) Receipt of psychological or emotional counseling by suicidal adolescents. Pediatrics 111(4):388–393. doi:10.1542/peds.111.4.e388

Rudd D, Joiner TE, Rajab MH (1995) Help negation after acute suicidal crisis. J Consult Clin Psychol 63(3):499–503

SFSO (2013) Die Schweizerische Gesundheitsbefragung 2012 in Kürze. Konzept, Methode, Durchführung

SFSO (2014) Standardisierte Sterbeziffern nach direkter Standardisierung

StataCorp (2013) Stata statistical software: release 13. College Station, StataCorp LP

Sudak H, Maxim K, Carpenter M (2008) Suicide and stigma: a review of the literature and personal reflections. Acad Psychiatr 32(2):136–142. doi:10.1176/appi.ap.32.2.136

Wang PS, Aguilar-Gaxiola S, Alonso J et al (2007) Use of mental health services for anxiety, mood, and substance disorders in 17 countries in the WHO world mental health surveys. Lancet 370(9590):841–850. doi:10.1016/S0140-6736(07)61414-7

WHO (2014) Preventing suicide. A global imperative

Wilson CJ (2010) General psychological distress symptoms and help-seeking intentions in young Australians. Adv Mental Health 9:63–72

Wilson CJ, Deane FP (2010) Help-negation and suicidal ideation: the role of depression, anxiety and hopelessness. J Youth Adolesc 39(3):291–305. doi:10.1007/s10964-009-9487-8

Wilson CJ, Deane FP, Ciarrochi J (2005) Can hopelessness and adolescents' beliefs and attitudes about seeking help account for help negation? J Clin Psychol 61(12):1525–1539

Wilson CJ, Deane FP, Marshall KL, Dalley A (2010) Adolescents' suicidal thinking and reluctance to consult general medical practitioners. J Youth Adolesc 39(4):343–356. doi:10.1007/s10964-009-9436-6

Wu P, Katic BJ, Liu XH et al (2010) Mental health service use among suicidal adolescents: findings from a US national community survey. Psychiatr Serv 61(1):17–24

Yakunina ES, Rogers JR, Waehler CA, Werth JL (2010) College students' intentions to seek help for suicidal ideation: accounting for the help-negation effect. Suicide Life-Threat 40(5):438–450. doi:10.1521/suli.2010.40.5.438

Yoshimasu K, Kiyohara C, Miyashita K (2008) Suicidal risk factors and completed suicide: meta-analyses based on psychological autopsy studies. Environ Health Prev Med 13(5):243–256. doi:10.1007/s12199-008-0037-x

Zachrisson HD, Rodje K, Mykletun A (2006) Utilization of health services in relation to mental health problems in adolescents: a population based survey. BMC Public Health 6. doi:10.1186/1471-2458-6-34