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Internet-based Interventions may Help Overcome Barriers in Mental Health Services: Pilot Study Results

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Abstract. The development of internet-based interventions could help overcome barriers in mental health services. In this study, we aimed to analyze how many people face barriers in mental health services in the sample of the online psychosocial intervention users; we also analyzed mental health among the participants of online intervention. **Methods.** A total of 117 participants, 90% (n = 105) women, aged from 18 to 82, were included in the study. Adjustment difficulties and the psychological well-being of participants were analyzed using the WHO-5 and ADNM self-report measures. We also investigated the perceived health care utilization barriers with questions designed specifically for this study. **Results.** One third of the participants reported experiencing barriers in accessing traditional mental health services in a community, and their adjustment difficulties were worse than those who did not report barriers in mental health care services. **Conclusions.** Results suggest that internet-based interventions can help reach people with significant psychological problems who otherwise wouldn't be able to receive mental health services.

Keywords. Internet-based interventions, online, barriers, mental health care.

Introduction

Even though there is a wide range of treatments for mental health problems that have strong evidence for their effectiveness, many people have no access to mental health services worldwide. Studies show that just a small part, from 22% to 36%, of depressed students receive mental health care (Givens & Thia, 2002; Eisenberg, Golberstein & Gollust, 2007), and only 26-40% of war veterans with post-traumatic stress disorders seek and receive treatment (Hoge et al., 2004). There are a wide range of reasons why people do not receive mental health services, and they range from personal beliefs about mental health care to external barriers. Research on mental health care barriers distinguishes attitudinal and structural or external barriers (Sareen et al., 2007). The most common attitudinal barriers of people who do not seek help are the wish to solve problems on their own, thoughts that certain emotional problems will go away, a fear of stigma and embarrassment associated with receiving mental illness treatment as well as not being able to recognize the symptoms of their mental health problems (Sareen et al., 2007; Gulliver, Griffiths & Christensen, 2010). Most common structural or external barriers of receiving mental health services include financial difficulties, lack of specialists in the area, long waiting time to receive treatment, and lack of time or transportation (Sareen et al., 2007; Gulliver, Griffiths & Christensen, 2010; Hoge et al., 2004).

In recent years, the field of internet-based psychological interventions grew immensely, aiming to reach people who otherwise deal with barriers in receiving mental health care (Sloan, Gallagher, Feinstein, Lee & Pruneau, 201; Amstadter, Broman-Fulks, Zinzow, Ruggiero & Cercone, 2009; Barak, Hen, Boniel-Nissim & Shapira, 2008). Although many attitudinal barriers, such as the wish to solve a certain problem on one's own or not recognizing any mental health problems are not easily solved by internet-based interventions, the perceived stigma of mental illness treatment is thought to be relieved by online treatments because of the possibilities to provide anonymity in such treatments (Amstadter et al., 2009; Possemato, 2011). Internet-based interventions could be a good solution to overcome many structural and external barriers to mental health services. Internet-based interventions can be accessed from distant locations, many online interventions have a substantial flexibility in terms of temporal access. Help can very often be provided to more people at the same time using online interventions, in contrast to traditional face-to-face treatments. Often enough, online interventions can be cheaper or even free for the users of these services (Barak et al., 2009; Sloan et al., 2011; Amstadter et al., 2009).

Internet-based interventions are widely embraced as a solution in overcoming barriers regardin mental health care. However, we could not find any studies that analyzed how many self-referred users of internet based interventions were actually using intervention because they had barriers to traditional mental health care, and how their mental health differs from other users. This information is important in understanding if internet-based interventions are actually seeked and used by people having barriers to usual mental health care. **The aim of this study** was to analyze how many self-referred users of the internet-based psychosocial intervention had no access to

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traditional mental health services in a community, and to analyze their mental health in comparison with internet-based intervention users who experienced no barriers to traditional mental health care services.

1. Methods

1.1. Participants

The participants of the study were users of the online self-help program BADI, developed by the Vilnius University Trauma Research Group (Skruibis et al., 2016). All participants had to be >=18 years to be included in the study. In total, 117 participants were included in the study. Participants' age ranged from 18 to 82, with the average being 40.32 (*SD* = 12.59). 90% (*n* = 105) of participants were women and 10% (*n* = 12) men. More than a half of participants (62%) were from Lithuania's biggest cities, 25% from towns, 11% from rural areas and 2% were Lithuanians living abroad. The majority of participants (78%) had a university degree, 15% a non-university degree and 8% high school or lower education. 80% participants reported working at the time, 15% reported studying and 15% not having a job.

1.2. Measures

The WHO-5 Well-being Index (WHO-5) (WHO, 1998) was used to assess the psychological well-being of the participants. WHO 5 is a self-assessment measure of psychological well-being created by the World Health Organization (1998). WHO-5 is comprised of five items describing the positive aspects of a psychological state. Participants were asked to rate how well each statement reflects their state in the past two weeks. Each item was scored from 0 (= at no time) to 5 (= all the time). The score of all five items were summed up, and ranged from 0 (= the worst possible well-being) to 25 (= the best possible well-being). It is recommended to multiply the raw score by 4, the total score then represents a percentage scale from 0 (= the worst) to 100 (= the best) (WHO, 1998). Recommendations by the World Health Organization (1998) suggest that a score below 50 indicates low well-being and shows a risk of depression. Internal consistency, measured with Cronbach alpha for WHO-5 in this study, was high at 0.88.

The Adjustment Disorder New Model (ADNM) (Maercker et al., 2008b) questionnaire was used to assess the adjustment difficulties of participants. The questionnaire was created to measure adjustment disorders, by its new definition described in proposals for ICD-11. The questionnaire consists of two parts. The first part is a stressor list consisting of 17 chronic and acute stressors. Participants were asked to indicate all stressors from the list that they had experienced in the last two years and which caused significant level of distress in the last six months. The second part of the questionnaire measures symptoms of the adjustment disorder. We used a revised version of the original 20 item ADNM instrument for this study (Maercker et al., 2007). Revisions were based on the previous study in Lithuanian population (Zelviene, Kazlauskas, Eimontas, & Maercker, 2017), which supported the two-core factor symptom structure of an adjustment disorder. Eight items were used in assessing the core symptoms of an adjustment disorder: preoccupation (4 items) and failure to adapt (4 items). Participants indicated how often they experienced symptoms on the ADNM using a 4-point Likert scale (1 = never; 2 = rarely; 3 = sometimes; 4 = often). The internal consistency of the ADNM-8 in this study was high with Cronbach alpha 0.90.

The mental health care accessibility of our participants was measured by asking them to indicate reasons why they wanted to use the program; one of the reasons listed was being unable to receive traditional psychological help, with examples of possible reasons like financial obstacles, a too long waiting list, location and others. Participants who answered that they registered for this online intervention because of the lack of access to traditional health care services were considering having barriers in accessing mental health care. Participants were also asked if they are seeing any kind of mental health care specialist at the time of data collection.

1.3. Procedure

Only baseline data collected during the registration to BADI intervention was used in our analysis. BADI is a internet-based psychosocial intervention platform designed as a self-help program for adjustment difficulties based on CBT principles (Skruibis et al., 2016). BADI was advertised via social media as a self-help stress management program and was free of charge for participants of the study. Participants were assessed online on the BADI website after they registered for the program and before they could see the content of the program.

2. Results

To analyze differences in the mental health of participants, they were divided into two groups: those who had reported experiencing barriers in receiving mental health and those who did not. One third (*n* = 37) of all

participants reported experiencing barriers in receiving mental health care. T-test analyses were carried out to test the differences between the groups. First, the average number of the reported who had experienced stressful events in last two years were compared. People unable to receive mental health care had experienced 3.60 (SD = 1.66) stressful events, while people able to receive mental care experienced 3.71 (SD = 1.96) stressful events; this difference was not statistically significant (t (115) = 0.32; p =.751). Next, the groups were compared in regard to mental health. Results can be seen in Table No. 1. Adjustment difficulties, according to the ADNM-8, were higher among people that were unable to receive mental health care than those who did not report such barriers, and this difference was statistically significant (p < .05). Psychological well-being did not significantly differ between groups in regard to statistics, even though those able to receive mental health care had on average a 7 points higher WHO-5 score.

Table No. 1. The comparison of psychological difficulties of participants who experienced barriers in mental health care with participants who had access to mental health care.

	Have access to mental health care (n=80)		Barriers to mental health care (n=37)		t	p
	M	*SD*	*M*	*SD*		
ADNM-8 Adjustment difficulties	25.51	5.04	27.57	4.48	2.06	.042*
WHO-5 Psychological well-being	43.70	17.6	36.65	20.34	1.92	.058

Furthermore, an analysis of mental health care received by the participants who did not report any barriers in mental health care was carried out. From 80 participants who did not report barriers in receiving mental health care, 28.8% (n = 23) reported seeing a mental health specialist at the moment. To analyze how that could influence the average mental health of those not reporting barriers in accessing mental health services, a t-test was calculated. Participants that reported seeing a mental health specialist at the moment had reported statistically significantly more stressful events (M = 4.5, SD = 2.1), than those who did not report barriers in mental health but were not seeing any specialists at the moment (M = 3.39, SD=1.37) (t (72) = 2.90; p = .004). Also, those that were seeing a mental health specialist at the moment had reported statistically higher adjustment difficulties (M = 27.44, SD = 3.95) than those participants who were not experiencing any barriers in mental health care, but were also not seeing any mental health specialists at the moment (M = 24.65, SD = 5.26) (t (72) =- 2.27; p = .026). Psychological well-being did not differ between those seeing mental health specialists (M = 39.83, SD = 17.54) and those who had access to mental health care but were not seeing mental health specialists (M = 45.26, SD = 17.52) (t (78) = 1.23; p = .213).

3. Discussion

We found that one third of participants who were seeking psychological help online by registering to an internet-based psychosocial intervention reported doing it because they could not receive traditional mental health care. Our study results support previous findings, namely that internet based interventions are gaining popularity because they help people overcome certain barriers in receiving mental health care (Amstadter et al., 2009; Barak et al., 2008). The fact that so many people seek help online because they have no access to traditional psychosocial services indicates not only that there are considerable issues with mental health care services in a specific community, but also that these people are willing to use internet-based psychological interventions as an alternative to traditional mental health services.

Furthermore, our analysis revealed that participants with barriers to mental health services, while not having more stressful events or worse psychological well-being, had more adjustment difficulties than people without barriers to mental health care. Both groups had much higher adjustment difficulties compared with previously reported results in Lithuanian samples (Zelviene, Kazlauskas, Eimontas, & Maercker, 2017), which could be explained by the fact that participants were seekers for online help. Higher adjustment difficulties among people reporting barriers to mental health care could be explained in several ways. People who are feeling significantly worse seek traditional mental health care if they are able to receive it. This is supported also by the fact that those who reported seeing a mental health specialist at the time of the study also had significantly higher adjustment difficulties. When having a choice, people with more severe problems might choose to meet a specialist face-to-face over internet-based intervention, or use a combination of traditional and online intervention. People who have high adjustment difficulties but experience barriers in traditional mental health care have to depend solely on internet-based interventions. Therefore, it might be that people with access to mental health care might register on the online

platform if their issues are not as severe, while people without access to see mental health specialists try internet-based programs even when their psychological issues are quite serious. Another explanation could be that those who have access to mental health care have better mental health, because even though they are not seeing a mental health specialist at the moment they could have received mental health care before, while those without access to treatments remained untreated and have worse adjustment difficulties at the moment. Socioeconomic reasons are also probable regards to why people without access to mental health care have higher adjustment difficulties. The reasons people experience barriers in mental health care like financial limitations or living in an area without a specialist could also be influencing their higher adjustment difficulties.

The fact that, among both groups with high adjustment difficulties, those who experience barriers in mental health care had even bigger adjustment difficulties reflects not only that people who are unable to receive traditional help seek it online, but also that they have significant psychological problems. This supports the growing field of internet-based interventions, showing that it is necessary to reach people with barriers in mental health care and that internet based interventions could be a valid way to do it.

Conclusions

- One third of the users of the online BADI intervention reported experiencing barriers in traditional mental health care services.
- The users of BADI online interventions who had experienced barriers in accessing mental health care had bigger adjustment difficulties in comparison with the users of BADI who reported having access to mental health care services in a community.

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Internetu grįstos intervencijos gali padėti įveikti kliūtis siekiant psichologinės pagalbos: Žvalgomojo tyrimo rezultatai

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Santrauka. Internetu grįstų intervencijų kūrimas galėtų padėti įveikti kliūtis gauti psichologinę pagalbą. Šiame tyrime buvo analizuojama kiek psichosocialinės internetu grįstos intervencijos vartotojų negali gauti tradicinės psichologinės pagalbos ir kokia yra jų psichinė sveikata. **Metodai.** Tyrime dalyvavo 117 asmenų nuo 18 iki 82 metų amžiaus, iš jų 90 proc. (n = 105) moterų. Buvo analizuojami dalyvių adapacijos sunkumai ir psichologinė gerovė. Naudoti klausimai apie tai, kas kliudo dalyviams kliūtis gauti tradicinę pagalbą. **Rezultatai.** Trečdalis dalyvių nurodė negalintys gauti tradicinės psichologinės pagalbos ir jų adaptacijos sunkumai buvo reikšmingai didesni nei tų dalyvių, kurie nenurodė kliūčių gauti tradicinę pagalbą. **Išvados.** Rezultatai rodo, kad internetu grįstos intervencijos gali pasiekti žmones turinčius rimtų psichologinių sunkumų, tačiau negalinčius gauti tradicinės psichologinės pagalbos.

Pagrindiniai žodžiai: internetu grįsta intervencija, psichologinė pagalba, psichinė sveikata.

Literature

Amstadter, A. B., Broman-Fulks, J., Zinzow, H., Ruggiero, K. J., & Cercone, J. (2009). Internet-based interventions for traumatic stress-related mental health problems: a review and suggestion for future research. Clinical psychology review, 29(5), 410-420.

Barak, A., Hen, L., Boniel-Nissim, M., & Shapira, N. (2008). A Comprehensive Review and a Meta-Analysis of the Effectiveness of Internet-Based Psychotherapeutic Interventions. Journal of Technology in Human Services, 26(2-4), 109–160. http://doi.org/10.1080/15228830802094429

Eisenberg, D., Golberstein, E., & Gollust, S. E. (2007). Help-seeking and access to mental health care in a university student population. Medical care, 45(7), 594-601.

Givens, J. L., & Tjia, J. (2002). Depressed medical students' use of mental health services and barriers to use. Academic medicine, 77(9), 918-921.

Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: a systematic review. BMC psychiatry, 10(1), 1.

Hoge, C. W., Castro, C. A., Messer, S. C., McGurk, D., Cotting, D. I., & Koffman, R. L. (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. New England Journal of Medicine, 351, 13–22.

Maercker, A., Einsle, F., & Köllner, V. (2007). Adjustment disorders as stress response syndromes: A new diagnostic concept and its exploration in a medical sample. Psychopathology, 40(3), 135–146. http://doi.org/10.1159/000099290

Maercker, A., Forstmeier, S., Enzler, A., Krüsi, G., Hörler, E., Maier, C., & Ehlert, U. (2008b). Adjustment disorders, posttraumatic stress disorder, and depressive disorders in old age: findings from a community survey. Comprehensive Psychiatry, 49(2), 113–120. http://doi.org/10.1016/j.comppsych.2007.07.002

Possemato, K. (2011). The current state of intervention research for posttraumatic stress disorder within the primary care setting. Journal of clinical psychology in medical settings, 18(3), 268-280.

Sareen, J., Jagdeo, A., Cox, B. J., Clara, I., ten Have, M., Belik, S. L., ... & Stein, M. B. (2007). Perceived barriers to mental health service utilization in the United States, Ontario, and the Netherlands. Psychiatric services.

Shore, J. H., & Manson, S. M. (2004). Telepsychiatric care of American Indian veterans with post-traumatic stress disorder: bridging gaps in geography, organizations, and culture. Telemedicine Journal & e-Health, 10(Supplement 2), S-64.

Skruibis, P., Eimontas, J., Dovydaitiene, M., Mazulyte, E., Zelviene, P., & Kazlauskas, E. (2016). Internet-based modular program BADI for adjustment disorder: protocol of a randomized controlled trial. BMC psychiatry, 16(1), 264.

Sloan, D. M., Gallagher, M. W., Feinstein, B. A., Lee, D. J., & Pruneau, G. M. (2011). Efficacy of telehealth treatments for posttraumatic stress-related symptoms: a meta-analysis. Cognitive behaviour therapy, 40(2), 111-125.

Wang, Z., Wang, J., & Maercker, A. (2013). Chinese My Trauma Recovery, a Web-based intervention for traumatized persons in two parallel samples: randomized controlled trial. Journal of medical Internet research, 15(9).

WHO. (1998). WHO-Five Well-Being Index (English version). Who, 0–1.

Zelviene, P., Kazlauskas, E., Eimontas, J., & Maercker, A. (in press). Adjustment disorder: Empirical study of a new diagnostic concept for ICD-11 in the general population in Lithuania. European Psychiatry. http://doi.org/10.1016/j.eurpsy.2016.06.009