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Searching Internet: a report on accessibility, nature, and quality of suicide-related information

Ana-Maria Marhan^{a*}, Doina Săucan^a, Camelia Popa^a, Bogdan Danciu^a

^a*Institute of Philosophy and Psychology “C. Rădulescu Motru” of the Romanian Academy House of Academy, Calea 13 Septembrie 13, 050711 Bucharest, Romania*

Abstract

Although many are concerned about Internet and its potential impact on suicidal behaviour, it is difficult to estimate how easy is for a user at-risk to find suicide-related information, or what kind of information is returned by a simple Internet query. In order to look at the quality, nature and accessibility of such information currently available to the Romanian-speaking users, a typical Internet search likely to be performed by a disturbed individual was replicated. The analysis of the returned results provides an indication of the nature and prominence of suicide-related information likely to be accessed by a common Romanian-speaking user.

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1. Introduction

The relationship between Internet access and committing suicide, especially in young people, is a topic of growing concern among mental health professionals and general public. Accelerated development of new information technologies change the way people communicate and access information, including in critical moments of life. Internet through features such as afforded anonymity and free access to information was multiple charged as a key facilitator of suicide (Alao et al, 2006; Merrick-Kenig. & Merrick, 2009; etc.). Worldwide media channels often report suicide cases where Internet technologies are involved and incriminated. Cases are reported, including in Romania, where Internet get involved at some point during the suicidal act, either it is about accessing specific suicide-related information, or rather communicating more or less explicit messages announcing a suicidal intention; in many cases,

* Corresponding author. Tel.: +4-072-270-6878; fax: +4-021-318-2442.
E-mail address: amarhan@psihologie.ro

suicidal thoughts are published and communicated via the Internet, in other cases a farewell message is sent via SMS, email, chat, or rather published on a personal website. Although constantly discussed in mass media, in Romania this issue still lays outside the area of rigorous research interests. No one really knows what kind of information is exposed to a disturbed individual while surfing the web, nor how difficult is for a typical Romanian Internet user to find suicide-related information. Hence, this paper aims to initiate a discussion on some basic issues related to the quality, nature and accessibility of suicide-related information available to the Romanian-speaking user, as a prerequisite in harnessing the potential offered by Internet technologies in prevention, but also intervention in these cases.

An overview of research on Internet and suicide

Although a relationship between Internet and suicide seems to be obvious, rather few empirical studies have investigated this problem to date. Recent searches (May and September 2011) of the PubMed database (<http://www.ncbi.nlm.nih.gov/pubmed>) using the keywords “Internet”, “suicide”, provided a list of 247 recorded studies on the subject. Basically, after 2005 the number of records grew dramatically as compared with the total number of entries recorded by 2004.

Table 1. Number of studies on Internet and suicide recorded by PubMed database since 1995 (as for November 2011)

1995	1	2000	11	2005	20	2010	34
1996	0	2001	6	2006	25	2011	37
1997	2	2002	9	2007	28		
1998	5	2003	6	2008	33		
1999	5	2004	1	2009	36		
1995-99	11	2000-04	33	2005-09	176	2010-11	71

Although this data is not comprehensive, it illustrates the evolution of the phenomenon, and the accelerated growth of interest (and concern) in this topic. As many authors note (Bronisch, 2004; Grohol, 2008; etc.) a direct causal relationship between the use of new technologies and the number of suicidal behaviours is difficult to be established. Such a research study would be quite difficult to conduct, rather impossible, which probably explains the absence of a rigorous approach of this topic in the scientific literature. The determinative factors conducting to suicide, as well as their complex interactions, are always very difficult to bring into light, as demonstrated by psychological autopsies performed in such cases (Shneidman, 2004). It is therefore unclear to what extent a certain dynamics of the number of suicide cases or suicide attempts could be placed in a direct causal relationship with the use of the Internet. However, the idea of Internet use as facilitator of certain types of suicidal behaviour seems much more plausible and acceptable (Alao, 2006). In any case, a better understanding of the phenomenon is both desirable and highly required.

2. Internet as an information and communication environment

At least two characteristics of the Internet are usually indicated as facilitators of the suicidal act: a) free access to information, b) mediated interpersonal communication. It is to note that the same two features could provide support in using Internet technologies as a tool of intervention and prevention of suicidal behaviour (Barak, 2007). Hence, several features are frequently incriminating Internet as a facilitator of suicide: first, Internet offers a huge, slightly controlled, amount of information that potentially encourage suicidal acts. The presentation of detailed information on suicide cases are accused to promote true "epidemic" of suicide or "suicide by imitation" (Shneidman, 2004; Bronisch, 2004); moreover, Internet provides information about tools and resources that can be used in the act suicidal; and last, but not least, the Internet offers the possibility to acquire such means. However, what clearly differentiate Internet from

other types of media, is that it mediates communication between individuals: people concerned with the idea of suicide can meet more easily other people animated by the same idea, although not in their immediate geographical reach. Moreover, Internet provides a space where the person at-risk can act anonymously, making it easier to talk openly about his or her views and feelings than in a face-to-face conversation. While anonymity may open new opportunities for seeking/offering professional support, it may also bring associated dangers. Especially for those who seek confirmation of their desire intrinsic to commit suicide, when communication is based-on-text and provides relatively few associated nonverbal cues, there is a greater tendency to interpret the messages directed to them in an affirmative sense (Barak, 2007). If the user of the traditional media is primarily a passive receiver of information, Internet users actively seek and choose the information and sources of information they access, including when it is potentially dangerous. Therefore, since April 2010, Google search engine started to implement a suicide prevention policy and restricts access to potentially dangerous information that might be returned by simple queries like “ways to commit suicide” and “suicidal thoughts”; instead, it prompts the users in 14 countries, including in the US, to access relevant support information. However, as the Chief Health Strategist for Google notes, no search engine is able to read the users’ mind, so many searches like “I want to end my life” will not always elicit the suicide warning (Zeiger, 2010).

3. Assessing the prominence and quality of suicide-related information

Although many concerns are raised about the impact of the Internet on committing suicide, it is difficult to estimate how easy someone can find suicide related information on the Internet, or what type of information is returned by a simple query (Biddle et al, 2008; Kemp & Collins, 2011). To our knowledge, such a systematic review was not yet performed in regards to suicide related information available over the Internet in the Romanian language. Hence, this section of our paper aims to initiate a discussion on this issue, and also to pilot a methodological framework in order to assess the quality, nature and prominence of such information on the Web. Observational studies of Internet search behaviour shows that most users use search engines in attempting to find relevant information, while they rarely use web portals, dedicated pages, repositories or libraries as a starting point. Moreover, their queries are usually based on a few key words, rarely includes phrase searches, and most often they do not look beyond the first page of results (Eysenbach & Kohler, 2002). Thus, we tried to replicate a typical Internet search likely to be performed by a disturbed individual when looking for suicide-related information available in the Romanian language. Following a suggestion of Biddle et al (2008), Recupero et al (2008), Kemp & Collings (2011) we selected a set of 8 keywords and derived phrases likely to be used in this purpose. In order to establish the set of keywords we followed two steps: first, a list of words likely to be used by an individual interested in finding relevant information on committing suicide was generated. In a second phase, the first selection of key words was checked against the data provide by the most comprehensive Romanian Internet traffic monitor engine (www.traffic.ro) and keywords with highest use frequencies over the last seven days (see table 2) and derived phrases were included in the final list.

Table 2. Some of the highest rated suicide-related keywords (statistical data provided by www.traffic.ro, September 2011)

Nr. crt.	Key words and derived phrases	Cumulative search frequency (7 days)
1	Suicide	138
2	Methods of suicide	124
3	How to kill myself	38
4	I want to kill myself	24

The final list of keywords we used to simulate a search of suicide-related information were the following: (a) suicide, (b) suicide attempt; (c) ways to commit suicide; (d) how to commit suicide; (e) how to kill myself; (g) I want to kill myself; (d) effective methods of suicide; (e) methods of suicide.

A total of 16 queries were performed using the two most popular search engines in Romania: Google.ro and Yahoo! We assumed that the first 10 sites returned by each search will provide the information likely to be primarily accessed by a common Romanian-speaking user. The returned websites were recorded for further analysis, according to their retrieval rank, resulting into a first raw sample of 160 hits. Search results were further coded manually by two different raters, and consensually classified according to the type of information source. Additional information was collected to further characterize the nature of the information on these Web sites (see table 3), and a basic content analysis reviewed any explicit reference pointing to suicide methods.

Table 3. Type of content provided by most frequent retrieve websites (as for September 2011)

Nr. crt.	Type of content	No (%) of hits (N=160)	No of times ranking first (N=16)
1	Journalistic content: news reports of individual suicides	31.25	4
2	User generated content: online communities and discussion forums approaching various general issues relating to suicide	30.00	7
3	User generated content: weblogs, personal webpages and online diaries	26.25	5
4	Information provided by mental health professionals	9.25	0
5	Academic content: online libraries, institutional websites	3.75	0

Further coding was conducted in order to identify duplicate hits across searches (as for instance when the same or linked pages from a single site were retrieved) and simple summary statistics were calculated. Eventually, this analysis resulted into a list of unique 82 websites likely to be access when performing a typical Internet search: unlike results of similar studies assessing information available in English (Biddle et al, 2008; Recupero et al, 2008; Kemp & Collings, 2011), none of the websites ranking high in our queries were judged as dedicated suicide sites that might encourage, promote, or facilitate suicide. Nonetheless, about 25% of the sites included in our sample are online news platforms (newspapers, televisions, news agencies etc.) occasionally reporting on suicides cases. Such information was ranking first in 4 of the 16 searches we performed. The vast majority of the news reports we reviewed provide information about the methods used, and in a few cases the reports were discussing also the compared efficacy of various suicide methods. Hence, Romanian media is often accused of inspiring similar suicide attempts. According to the news reports we reviewed during this exercise, at least two over-reported suicide cases seemed to have produced such effect in the last year. However, this relationship is a hypothesis, based solely on information provide by the collected news report. Unfortunately, when they do exist, the Romanian academic or policy websites providing information and support are not easily searchable and accessible on the Internet. Although 9.25% of the websites in our sample were included in the category, none of those were ranking first in any of the searches we performed. Most of these pages provides general, academic-like, neutral, information on suicide, even though they are connected to popular medical advices sites that offers also online health advice from consulting experts. Only one of the sites included in this sample is linked to a psychologist private practice site, and one to a missionary website. It is important though for researchers, teachers and mental health practitioners to take action and develop easily accessible specialist content, while strengthening the presence of suicide prevention and support web services. The last category (academic content) includes sites offering academic information on topical issues relating to suicide; the dedicated page provided by Wikipedia was also included here.

Still, most of the hits ranking high on this exercise (61.35 %) are websites providing user generated content: 34.09% are personal pages and blogs, while 27.26 or discussion forums in online communities,

where people discuss various issues, express and share their distress, exchange opinions, seek advice and provide information. and links to sources of help. Sometimes, these pages also provide information about suicide methods in a purely factual way, sometimes simply jokingly, but nevertheless suggestive of real methods. This content is very important, its abundance and popularity proves that users need support and information. On the other hand, one of the challenges with user generated content is that it may be highly inaccurate, and may not be appropriate especially when it is about providing emotional support to suicidal person. Writers can presume authority or expertise where they have none, and the reader may not always be able to discern the false from the true.

4. Conclusion

Although dedicated Romanian suicide sites were not found in our sample, technical information on suicide methods eventually can be obtained, both from online newspapers and health promoting information sites, but also from user generated content. We should agree with Kemp & Collings (2011) who note that an investigation of the results of the search engines alone could not account for deeper, networked-based structure of suicide related internet, nor for its true visibility to internet users. Moreover, especially when it is about user-generated content, most of the potentially dangerous content is developed in closed online communities, making it invisible to a simple Internet query. While the amount of the suicide-related information available in Romanian language is incomparably smaller than the one available in English, it grows constantly. Professionals in the field of mental health, society as a whole, should be aware of the behaviour and experiences of at-risk individual using the Internet. An indication of the prominence of available information type, as well as of its likelihood of being accessed by a common Romanian-speaking user, can guide mental health professionals to develop and implement more effective prevention tools.

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