

## Short Communication

# Why urban Indians are interested in an internet based self-care app for depression? A brief pilot survey

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## ABSTRACT

**Background:** Digital technology has emerged as a powerful approach to bridge treatment gap in the field of mental health. However, public health impact of e-interventions is unlikely without large scale uptake of such services. Hence it becomes important to understand motives of potential users in order to design programs that address such needs as well as disseminate information about the same in ways that appeal to the users.

**Methods:** Reasons underlying interest in an internet based self-care program for depression were explored through a brief survey of potential users who had explicitly shown interest in such a program. Responses to an online survey were received from 120 respondents out of which about 69% were in 18-35 years of age-range and 12% were above 50 years of age.

**Results:** Preference for flexibility in terms of 'when I do things to help myself', 'not having time to go for face to face counselling/therapy' and 'wanting to learn and do something to prevent problems in future even though I am currently on treatment' emerged as the top 3 reasons underlying interest in internet based self-help programs for depression. Not having the finances to seek face to face mental health consultation emerged as one of the top 3 reasons in the older group.

**Conclusions:** Incorporating maximal flexibility, providing pointers to the most relevant components thereby minimizing time required, and focusing on preventive strategies (even for those who are currently seeking treatment) are aspects that need to be considered in development and dissemination of internet based self-help programs for depression in urban India.

**Keywords:** Mental health self-help apps, Internet-based interventions for depression, Digital mental health, Mental health e- interventions

## INTRODUCTION

Despite significant advances in development of efficacious mental health interventions, making cost effective mental health services accessible to people and increasing the uptake of such services remains one of the major public health challenges across the globe.<sup>1,2</sup> A

recently completed national mental health survey from India reported staggering levels of treatment gaps of more than 60% for all mental disorders.<sup>3</sup>

A variety of factors have been recognized as barriers to help seeking for mental health issues ranging from stigma and embarrassment, low mental health literacy,

confidentiality concerns, over-reliance on self, low affordability and lack of easy access to mental health services, to name a few.<sup>4-7</sup>

Use of digital technology has emerged as a potentially powerful approach to bring mental health services closer to people with unmet needs.<sup>8-10</sup> There is a rapid increase in penetration of internet and ownership of smartphones in India which suggests the potential scope of e-mental health interventions.<sup>11,12</sup> In a global survey carried out across 31 countries with a sample of patients and carers of long term health conditions (including mental health conditions), some of the top wants from health apps included help in understanding health conditions and treatment options, support in terms of planning and monitoring symptoms/progress. On the other hand, major barriers cited were confusing choices of apps, uncertainty about the most relevant apps and lack of trust/credibility issues.<sup>13</sup> Internet is being increasingly used as a source of mental health information by general population as well as those with diverse mental health needs.<sup>14-16</sup>

Studies in varied settings have explored preferences of individuals regarding different formats of mental health interventions.<sup>17</sup> Ease of access, privacy and anonymity, flexibility, low effort, convenience and low cost are mentioned as some of the factors that underlie preferences for e-mental health interventions.<sup>18-19</sup> However, deficient e-awareness and ambivalent attitudes have also been reported.<sup>20</sup> Though several structured internet based mental health interventions have been developed and tested for efficacy, the potential public health impact of these programs is unlikely to be realized without wide-scale uptake and optimal rates of completion/adherence.<sup>21</sup> A scoping review meant to understand public acceptability of e-interventions concluded that these were perceived as less helpful than face-to-face interventions.<sup>22</sup> Moreover, therapist-assisted e-interventions were preferred over unguided ones. However studies used in this review employed general population samples, making it difficult to arrive at a clear understanding of the needs and motives that drive actual uptake of internet based interventions.

## METHODS

### *Aim*

The present study aimed to understand self-reported reasons for interest in exploring an internet based self-help program for depression.

### *Sample*

Individuals who had explicitly conveyed an interest in exploring the use of an internet based self-help program, currently being pilot tested in India constituted the study universe. This is a structured internet-based self-help program called PUSH-D (Practice and use self-help for depression). The study was initiated after ethical

clearance by the concerned institute at Bangalore and recruitment for PUSH-D program involved obtaining written informed consent. In the process of sample recruitment, the program was announced on multiple platforms (e.g. websites, emails, write-ups, posters on notice boards of institutions and distribution of flyers in public places during health exhibitions). All those who contacted, expressing interest to know more about PUSH-D/requesting registration within the first 6 months of the announcements were sent a link to a brief online survey. The survey consisted of a single key item with multiple response options. This item inquired about the individuals' personal reasons underlying interest in internet based self-help program for depression, such as PUSH-D. Twelve options/reasons were provided in a checklist format. These were based on literature regarding felt needs for internet based interventions and emergent themes in initial interactions with potential users. Also, there was an open text field to enter any other reason not covered. Age and gender were the only other demographics that were asked for.

## RESULTS

The survey was sent to 165 persons between the months of January 2017 to April 2017. A maximum of two reminder requests were sent within a month's period. A total of 120 responses (response rate: 73%) received till date formed the basis for analysis.

The sample has almost equal representation of both the genders (51% females and 49% males). Those in 18-35 years of age range formed the bulk of the sample (69.2%). Those in 36-50 years of age range comprised 19.2% of the sample with the remaining 11.6% being above 50 years of age. Additional information on demographics was available from 92 out of 120 who contacted the research team again for registration into PUSH-D program. Based on this, it was observed that two third of them were graduates/were doing under graduation courses; while one third had postgraduate level qualification. Forty one percent were students, 35% were working, while 24% were homemakers, retired or job seekers.

### *Endorsement of reasons for interest in internet based self-help programs for depression*

Preference for flexibility in terms of when I do things to help myself, not having time to go for face to face counselling/therapy sessions, and wanting to learn and do something to prevent problems in future despite being on treatment currently emerged as the top 3 reasons underlying interest in internet based self-help programs for depression (Table 1).

Differences between genders and between younger and older subgroups were also examined in terms of top 3 reasons endorsed. There were minor gender differences in terms of top reasons. While, learning to do things to

prevent problems in future despite being on treatment, perception of problem not being severe and lack of proximity to a mental health professional came up as unique reasons in the list of top 3 reasons in males; 'being curious emerged as a unique top reason in females. Younger and older age groups (>51 years and <50 years) had several commonalities in endorsements of top reasons except that not having the finances to seek face to face mental health consultation and perception of the problem not being severe emerged as one of the top 3 reasons only in the older age group (Table 2). On an

average, 2 reasons were endorsed by the respondents, with only 33% endorsing a single reason. Nineteen percent mentioned 'other reasons' (in the open-ended text field) such as: Gaining clarity about the problem, perceived trivialization by a professional, to reduce dependence on medication, not wanting to disclose to anyone, recommendation by another person, sense of trust in credibility of the organization, dissatisfaction with psychiatric consultations due to lack of sufficient interactivity, wanting to increase awareness about scientific approach for depression management.

**Table 1: Reasons for interest in internet based self-help program for depression.**

S no.	Item	Frequency	Percentage
1	I do not have finances to seek face to face mental health consultation	28	23.3
2	<b>I do not have the time to go for face to face counseling/therapy sessions</b>	<b>46</b>	<b>38.3</b>
3	There is no mental health professional close to my location	24	20
4	I am not comfortable in meeting someone face to face and talking about my problem	20	16.7
5	I do not think my problem is severe to need face to face contact with a mental health professional	31	25.8
6	<b>I like the flexibility in terms of when I do things to help myself</b>	<b>47</b>	<b>39.2</b>
7	I prefer to do something on my own rather than rely on meeting some expert	26	21.7
8	To help my loved one who has a mental health problem	18	15
9	Just curious	33	27.5
10	<b>I want to learn and do something to prevent problems in future although I am on treatment/therapy</b>	<b>40</b>	<b>33.3</b>
11	I am not satisfied with counseling/therapy I am receiving/have received	13	10.8
12	Wanted to see how I can use it for my patients/clients	8	6.7

Note: Top 3 reasons are denoted by boldface.

**Table 2: Top reasons endorsed by age and gender subgroups (N=120).**

Gender Subgroups		Age Subgroups	
Males ( n=61)	Females (n=59)	Age <51 years	Age >50 years
I do not have the time to go for face to face counseling/therapy sessions (37.3%)	I like the flexibility in terms of when I do things to help myself (42.6%)	I do not have the time to go for face to face counseling/therapy sessions (42.9%)	I like the flexibility in terms of when I do things to help myself (47.2%)
<b>I want to learn and do something to prevent problems in future although I am on treatment (37.3%)</b>	I do not have the time to go for face to face counseling/therapy sessions (39.3%)	I want to learn and do something to prevent problems in future although I am on treatment (36.9%)	I do not have the time to go for face to face counseling/therapy sessions (27.8%)
I like the flexibility in terms of when I do things to help myself (35.6%)	<b>Just curious (32.8%)</b>	I like the flexibility in terms of when I do things to help myself (35.7%)	<b>I do not have finances to seek face to face mental health consultation (25%)</b>
<b>I do not think my problem is severe to need face to face contact with a mental health professional (25.4%)</b>	-	-	<b>I do not think my problem is severe to need face to face contact with a mental health professional (25%)</b>
<b>There is no mental health professional close to my location (25.4%)</b>	-	-	I want to learn and do something to prevent problems in future although I am on treatment (25%)

Note: Top 3 reasons presented in descending order in each subgroup. Top reasons unique for subgroups shown in boldface. In case of ties, all the tied reasons are presented. Figures in parentheses indicate percent endorsement within the subgroups.

## DISCUSSION

Preference for flexibility that is inherent in self-care apps, time costs involved in seeking professional mental health help especially in terms of counselling /therapy, and the need for self-empowerment by learning preventive self-care for mental health were endorsed as top 3 reasons for interest in internet based self-help apps for depression in the present study. Some of these findings are broadly similar to previous studies.<sup>18-19</sup> However, the study captured the perceptions of potential clients in India who showed an initial inclination/readiness/felt need to use an internet based self-help program, unlike studies that rely on a general population, most of which have been carried out in other socio cultural contexts. Moreover, the findings also bring to light the fact that individuals who are already in contact with traditional mental health services are also likely to be interested in learning self-help methods in order to experience a sense of mastery over challenges related to illness/ engage in actions to prevent future problems and work towards a psychological sense of recovery. It has been observed that regular consumers of mental health services may not routinely receive professional care to facilitate full recovery.<sup>23</sup> This in turn indicates that internet based programs that supplement professional help may be well received in urban Indian health care settings.

The pattern of findings provides insights into motives and expectations of potential users in India. Such interventions may help in reducing the high treatment gap for depression and other common mental health conditions in the country, if there is availability and good uptake of such programs.<sup>11</sup> Preventive focus and lack of easy access to mental health professionals were some of the top reasons underlying interest in self-help apps in males while curiosity to know about the app was one of the top 3 reasons in females. Perception of one's problems being less severe also seemed to work as one of the top factors for males and older adults to explore self-help methods rather than seek face to face professional consultation. This is in line with WHO guideless for developing and using low intensity self- help interventions for mild problems, particularly in low resource settings.<sup>24</sup> Affordability of psychological interventions was reported to be one of the top reasons for interest in internet based self-help in the subgroup of older adults who may experience challenges in bearing expenses related to multiple counselling/therapy sessions in urban Indian settings. In such scenarios, well designed e-interventions can make mental health care more affordable, particularly for retired /non-working individuals in need of supportive care.

## CONCLUSION

This pilot study highlights potential reasons for appeal of an internet based self-help program in urban Indians that can influence uptake of such programs and need to be

considered while designing programs and disseminating program-information. Incorporating maximal flexibility to the users, providing pointers to the most relevant components thereby minimizing time required, and focusing on strategies to prevent future problems ( even for those already seeking professional help) are likely to increase uptake of such programs in urban India. Moreover, programs that are free to use may be particularly appealing to older adults.

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