

Do apps have anything to offer mental health?[†]

COMMENTARY ON... SMARTPHONE APPS IN MENTAL HEALTHCARE

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SUMMARY

Many people with mental health problems spend a large proportion of their life online and an increasing number of apps address mental health and well-being. This article offers reasons why psychiatrists should learn how to use mental health apps to enhance patient care and gives some caveats for both professionals and patients regarding their use.

DECLARATION OF INTEREST

R.M. is funded by the National Institute for Health Research (NIHR) Collaboration for Leadership in Applied Health Research and Care East Midlands and is Mood Disorders Theme Lead for the NIHR-funded MindTech Healthcare Technology Co-operative. The views expressed are those of the author and not necessarily those of the NHS, the NIHR or the Department of Health.

(Kim 2009); people can present themselves differently online than in the rest of the life and have difficulty reconciling these roles; communication can be instant, given without much thought and can be bullying in nature, a serious problem if the person spends a lot of time online, if the bullying becomes stalking or if it involves others collectively; apps can provide misinformation or dangerous information (e.g. pro-suicide behaviour) as much as useful information to promote self-diagnosis and self-management. On the other hand, e-mental health can also provide support and social contact for many who are unable to leave their home, perhaps because of depression or agoraphobia. Many apps are no longer just simple questionnaires or games: they can offer sophisticated interpersonal communication (Hollis 2014).

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A responsibility to patients and the public

Second, the number of apps about mental health and well-being is growing at an exponential rate. A practical problem with demanding an evidence base for them is that, by the time a randomised controlled trial is funded and completed, the app in question is already obsolete, is no longer available or has changed out of all recognition. It might be more realistic to explore proof of principle in randomised controlled trials. Mental health professionals and patients need to interact with app developers at an early stage to create and evaluate effective and safe apps for mental health problems. Organisations such as the National Institute for Health Research MindTech Healthcare Technology Co-operative (www.mindtech.org.uk) offer such opportunities. Furthermore, apps are being developed internationally and so quickly that it is almost impossible to set up a regulatory framework. In addition, most apps are produced by engineers with little funding to sustain them for long, so they become unavailable quite soon after their launch. As mentioned by Zhang *et al*, in England the NHS Choices website has launched a site or repository of apps that have an evidence base and are likely to be sustained (<http://apps.nhs.uk>) (Hollis 2015).

[†]See pp. 354–358, this issue.

In this issue of *Advances*, Zhang *et al* (2015) outline the current state of the evidence on smartphone applications (apps) for patients' use in mental healthcare. Here I offer a number of reasons why psychiatrists should become familiar with such apps and with e-mental health more generally.

The online generation

First of all, many people, especially adolescents and young adults, spend a large proportion of their life online, and their social interactions are often with people they will never meet face to face. These young people may have high rates of depression, anxiety, suicidal thoughts and suicide attempts (Carli 2014). The rapid rise in the use of mobile phone apps, tablets and the internet by people with existing mental health problems mirrors that of the general population, except among older people (Ennis 2012). Psychiatrists need to understand their patients' life context, especially in relation to their interpersonal contacts. The use of apps can be a distraction or avoidance behaviour from dealing with other difficulties in life, particularly loneliness in people lacking confidence in their social skills

Benefits to clinical practice

Third, apps are tools that psychiatrists can utilise to enhance their own practice. For instance, the nine-item Personal Health Questionnaire (PHQ-9) (Kroenke 2001) is available free of charge for self-completion by patients and can have a graphical presentation. Patients can record their depression each week serially on this app and the record can be used in the consultation with the psychiatrist to discuss the course of their depression since the last visit. The app record of mood can save 10 minutes or so of questioning of the patient during a consultation and it is likely to be more accurate than a patient trying to recall their mental state retrospectively in the office. Research into such use of the PHQ-9 does not seem necessary, given the large body of psychometric research on its paper form. Patients are more likely to sustain the use of such e-mental health interventions if the clinicians they see make use of the information recorded and encourage their continued use (Robotham 2014). Psychiatric training should address prescribing and appraisal of apps and online digital interventions, so that psychiatrists can advise mental healthcare services on their effective use, be confident of their safety and use them optimally.

Expanding patients' options for self-management

Fourth, apps and e-mental health in general add to the range of approaches for self-management. As a result, greater numbers of people successfully self-manage or are reassured about the advice they have already received from health services, thereby reducing the need for further healthcare contacts (Powell 2011). However, other people may attend more often because apps highlight a mental health problem they did not previously realise or they become more anxious about a health problem if they receive conflicting information from different apps, particularly if they already have high health anxiety (Muse 2012). Apps can also be used to reinforce psychological treatments and to alert patient and staff of signs of deterioration or improvement in mental states (Hollis 2014).

Data protection and confidentiality

Fifth, psychiatrists need to be aware of data protection and confidentiality issues that can arise with the use of healthcare apps. Patients need to know that they risk not only the accidental sharing of data with others (including health professionals), but also providing personal or personally sensitive details that can be used by others without permission or in an exploitative way (Hollis 2014). Moreover, the downloading of smartphone app information into a patient's computerised personal health

records may pose problems for the psychiatrist, a potential barrier to their routine use in healthcare. New approaches to encryption may help with data protection and data-sharing.

Social inequalities

Mental health apps are not universally applicable tools in patient care. A potentially serious drawback is that some people will lack the financial means to own smartphones or the confidence to use them (Ennis 2012). They may also already have multiple other barriers to obtaining care for their mental health problems, such as poor education, inability to plan or sensory impairments. In addition, people are reluctant to talk about mental health problems on apps accessed on devices they share with other people or the public because of the personal nature of the information, so they may only use mental health apps if they own the device on which the app is stored. However, smartphones are becoming cheaper and many apps do not in fact require a smartphone (running, for example, on an ordinary computer), so cost may be less of a problem even in low-income countries.

Conclusions

Despite the problems highlighted, the increased use of mental health apps can be positive and seems inevitable, so psychiatrists should learn how to use them well to enhance patient care.

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