Table S1: Barriers and facilitators to participation in online psychotherapy

| **Barriers and facilitators** | **Summary codes** | **Quotations** |
| --- | --- | --- |
| *Main barriers* | Both groups   * not tailored to the individual * personal interaction is important | *"[...] now I would not, because I didn’t think I needed it, but I might have done in the past." (Patient 1, 50 years old, male).*  *"Online is great, but every so often you should have a forum where you see people, where you see faces, and you see hearts. Because of the sad things for a lot of IBD sufferers, it's the loneliness. [...]." (Patient 12, 59 years old, female).*  *"[...] some people just don't like admitting that they have got the problem and like to try to manage things with their head in the sand." (Female, health professional, 53 years old).*  *"There isn't a reason why I wouldn't do it. Why would other people not do it? [They] might think there is some kind of stigma attached to it. But, personally, I wouldn't think that." (Patient 13, 32 years old, female).*  *"[Not] for everybody, […] it isn't flexible enough to meet the individual needs of the user." (Female, health professional, 30 years old).* |
| Patients   * it doesn't work for me * feeds loneliness / isolation * do not need it now * stigma attached to it * no access to the Internet * negative attitude to the Internet and mobile apps |
| Health professionals   * patients not admitting the problem * some people would not use it – older age, computer illiterate, with learning difficulties or not well educated * busy lifestyle * lack of motivation |
| *Barriers regarding limitations of online psychotherapy* | Health professionals   * limited role of online psychotherapy * uncertainty about the patient involvement and ability to facilitate and complete the self-directed online programme * involvement in the self-directed programme - a mixed bag | *"I think it could be very useful. I think, similar to the one I have used in IAPT [Improving Access to Psychological Therapies] services. I think, if you think about a stepped care model it would probably be used, maybe for the people with a milder psychological problem, who might be more motivated to access it and to drive themselves to complete it independent of a facilitator or a therapist [...], but [...] a more severe mental health [...] I would feel a bit more concerned directing people to that mode of intervention. I think there is a role for computerised therapies, but I do think that it is a limited role. [...]. I think my main message would be that it isn't for everyone, and it cannot be instead of having the availability of one to one, face to face psychotherapy if needed." (Female, health professionals, 30 years old).*  *"I think it depends on the symptomatology and whether they think […] it is an issue for them. So, I think it is probably about the patient's selection" (Male, health professionals, 49 years old).* |
| *Barriers – lack of understanding of psychotherapy* | Both groups   * a vague understanding of the talk therapy   lack of knowledge | *"It's just talking through it. It's just talking if you've got any issues. [...]. I don't know how helpful it would be with IBD [...] I'd say more practical, doing a thing is better rather than talking." (Patient 9, 20 years old, female).*  *"It won't change the symptoms, but it will change how I feel about them" (Patient 3, 49 years old, male).*  *"It is a therapy that involves talking to someone through your thoughts and feelings to help you manage your problems by changing the way you think and behave, like CBT." (Female, health professionals, 43 years old).* |
| *Barriers – online psychotherapy needs to be clinician-assisted* | Both groups   * the personal level was important * preference for a clinician-assisted online programme | *"[...] one to one relationship with somebody [...] to me was really-really important" (Patient 7, 67 years old, female).*  *"The ideal way to do it would be to have your first meeting with the clinician; then after that, it would be online. So, they [..] talk you a little bit through it and to lay out and tell you what the outcomes are. [...] if you meet somebody face to face, you might reinforce the importance of it and how helpful it can be [...]" (Patient 13, 32 years old, male).*  *"Either of them, [...], because text works as well." (Patient 10, 45 years old, female).*  *"[...] my main concern about the computerised therapy [...], it takes away the therapeutic relationship, which is the facilitator for change for a lot of people." (Female health professionals, 30 years old).*  *"[...] the clinician-assisted version would work a lot a lot better. [...] to be able to then talk about the content of what you were doing online [...] it could be at the beginning, after a month, yeah, the middle and the end, it could just be less frequent contact than what you would do in normal therapy. [...], it might help as much with the motivation to continue with the programme." (Female health professional, 30 years old).*  *"[...] some people like talking, it is the best way of resolving problems, and there are people who just like to get on with things [...]." (Female health professionals, 53 years old).* |
| *Main facilitators* | Both groups   * positive attitude towards the Internet, mobile apps and participation in online interventions * accessibility * flexibility * confidentiality * personal interaction (partial human contact) * tailoring intervention to individual needs * encouragement from health professionals * family support * presents the elements of the programme from a patient’s perspective * patients' testimonials * the programme makes the difference to patient wellbeing * keeps patient interest in the programme * repeated reminders | *"I don't use a computer[...]. I find it difficult to use a computer. [...] my wife [...] is into computers for years. [...]. I would use it. [...], my wife will make that [happen]. Yeah, I am sure, I would" (Patient 4, 70 years old, male).*  *"I would, if the IBD nurse recommended it, that would be one incentive." (Patient 1, 50 years old male).*  *"[...] it allows me to choose the bits that I think would be the most helpful and for me to do it in my own time." (Patient 1, 50 years old, male).*  *"[...] it may be accessible within their own time, they can do it in the evening, on the night, on the weekend, you know, they can dip in and out it, they could go back to it." (Female, health professionals, 32 years old).*  *"... the chaps in my office [...], the men are glued to the computers all the time, even in the lunch hours whereas the women took a break to talk to people about their various problems, the problems with their health, the problems with their children, the problems with their make up or whatever and I just wonder if males automatically turn to the Internet now and women may be less so and maybe that will be reflected in the website. And, I think, that men and women may handle the disease differently as well." (Patient 6, 68 years old, female).*  *"I find the support from other people with IBD online invaluable" (Patient 12, 59 years old, female).* |
| Patients   * suitable for people with social anxiety * there is nothing else available * gender differences in usage |
| Health professionals   * useful for those younger and more computer savvy |
| *Facilitators -online psychotherapy as a way to take control of one’s own treatment* | Patients   * would like to take control of own treatment * would like to get health professionals’ support | *"It's got to be the person's own responsibility" (Patient 2, 39 years old, male).*  *"I would absolutely dearly love to take control of my own treatment. Do I have the ability? No, absolutely not." (Patient 12, 59 years old, female).*  *"Well, I would, but I also like […] having specialists looking after me." (Patient 8, 70 years old, female).* |
| *Facilitators - previous experience of psychotherapy helps* | Patients   * no experience * counselling * CBT * hypnotherapy * had positive outcomes | *"[...]* *seeing a psychologist certainly helps [...]. It did help me." (Patient 4, 70 years old, female).*  *"My experience of CBT [...] was 20 years ago. And I'm still […] benefiting from […] changing my thinking. I never knew that I could think in a different way. That's what my CBT taught me." (Patient 1, 50 years old, male).*  *"I haven't used it personally […]." (Female health professionals, 30 years old).* |
| Health professional   * no experience with psychological intervention |
| *Facilitators -online psychotherapy improves mental and physical health* | Patients   * helps accept the condition * provides information / reassurance * offers a positive outlook / improved QOL * help flares through the management of stress   manage anxiety and stress | *"I think that even just a short time that I've spent looking at it ["Tame Your Gut"], it makes me realise, I've got to be more positive about what I've got rather than focusing on the negatives of the IBD. If you reduce the stress, I do believe, it would probably help your flare-ups" (Patient 5, 56 years old, female).*  *"I would expect my mental outlook to change. It's the mental I have a problem with. [...] by doing this [the online psychological intervention], I think this might change my outlook...* *(Patient 8, 70 years old, male).* |
| *Mixed factors – previous experience using apps and Internet influences perceptions of online psychotherapy* | Patients   * two patients had previous experience using internet apps for depression * none used the apps or the Internet for IBD management | *"The app [...] for depression. Not for IBD, but for mental health. The calming things, they're really good." (Patient 9, 20 years old, female).*  *"I did try a couple of Internet apps for stress. [...] but [...] I just started getting irritated, [...] on the Internet you are sitting there, and you breathe in, and you breathe out, at the end you feel like saying like shut up to the app." (Patient 6, 68 years old, female).*  *"I do not really have any, at all really, apart from directing people to the websites for information, but not apps or anything like this." (Female health professionals, 52 years old).*  *"I [...] have used it as a staff member [...] we use two computerised programmes for depression and anxiety. [...] to some people it provided greater flexibility, [...], [but] it takes away the therapeutic relationship, which is the facilitator for change for a lot of people."* |
| Health professionals   * no experience of using apps for IBD or mental health * one health professional used for the management of mental health. |