



King's Research Portal

DOI: 10.1111/bjhp.12304

Document Version Peer reviewed version

Link to publication record in King's Research Portal

Citation for published version (APA):

Harvey, J. M., Sibelli, A., Chalder, T., Everitt, H., Moss-Morris, R., & Bishop, F. L. (2018). Desperately seeking a cure: Treatment seeking and appraisal in irritable bowel syndrome. *British Journal of Health Psychology*. https://doi.org/10.1111/bjhp.12304

Please note that where the full-text provided on King's Research Portal is the Author Accepted Manuscript or Post-Print version this may differ from the final Published version. If citing, it is advised that you check and use the publisher's definitive version for pagination, volume/issue, and date of publication details. And where the final published version is provided on the Research Portal, if citing you are again advised to check the publisher's website for any subsequent corrections.

General rights

Copyright and moral rights for the publications made accessible in the Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognize and abide by the legal requirements associated with these rights.

- •Users may download and print one copy of any publication from the Research Portal for the purpose of private study or research.
- •You may not further distribute the material or use it for any profit-making activity or commercial gain •You may freely distribute the URL identifying the publication in the Research Portal

If you believe that this document breaches copyright please contact librarypure@kcl.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.

Download date: 17. Oct. 2024

Treatment seeking and appraisal in irritable bowel syndrome

Abstract

Objectives: Irritable bowel syndrome (IBS) is common and adversely affects patients' quality

of life. Multiple potential treatment options exist for patients (and clinicians) to choose from,

with limited evidence to inform treatment selection. The aim was to explore how patients

with IBS go about seeking and appraising different treatment modalities, with a view to

elucidating the psychological processes involved and identifying opportunities to improve

clinical practice.

Design: Qualitative study nested within a randomised controlled trial of therapist-delivered

and web-based cognitive behavioural therapy versus treatment-as-usual for IBS.

Methods: 52 people participated in semi-structured interviews about their prior experiences of

treatments for IBS. Transcripts were analysed using inductive thematic analysis.

Results: Key themes (desperation for a cure, disappointment at lack of cure, appraising the

effects of diverse treatments, and hope for positive effects) clustered around an overarching

theme of being trapped within a vicious cycle of hope and despair on treatment seeking. A

desperation and willingness drove interviewees to try any treatment modality available that

might potentially offer relief. Coming to accept there is no cure for IBS helped interviewees

escape the vicious cycle. Treatments were appraised for their effects on symptoms and

quality of life while also considering, but rarely prioritising, other aspects including:

convenience of the regimen itself, whether it addressed the perceived root causes of IBS,

perceived side-effects, and cost.

Conclusion: Treatment seeking in IBS can be challenging for patients. Supportive

discussions with health care professionals about illness perceptions, treatment beliefs, and

goals could improve patients' experiences.

Trial Registration number: ISRCTN44427879

1

Treatment seeking and appraisal in irritable bowel syndrome

Keywords: Irritable Bowel Syndrome; Qualitative methods; Attitude to Health; Treatment beliefs.

Introduction

Irritable Bowel Syndrome (IBS) is a chronic functional gastrointestinal disorder or disorder of gut-brain interaction, currently conceptualised as involving multiple interacting biopsychosocial factors (<u>Drossman, 2016</u>). It affects around 10-14.9% of the UK population with similar worldwide prevalence (Michalsen, Vandvik, & Farup, 2015; for a review see Lovell & Ford, 2012), and it affects more women than men (Quigley, Bytzer, Jones, & Mearin, 2006). Symptoms include abdominal pain, discomfort and altered bowel movements, and personal, social, professional, and health-related quality of life is typically reduced (El-Serag, Olden, & Bjorkman, 2013; Håkanson, Sahlberg-Blom, Nyhlin, & Ternestedt, 2009; Taft et al. 2011; 2013; 2014).

Few current treatments offer satisfactory symptom relief (Schoenfeld, 2005). NICE clinical guidelines (2008, updated 2017) recommend clinicians provide advice on the importance of self-help for the effective management of IBS, where self-help encompasses lifestyle adjustments, general diet advice, advice to be physically active, and symptom-focused medications. If general dietary advice is ineffective then NICE recommend single food avoidance and exclusion diets under the supervision of a healthcare professional with expertise in dietary management. Beyond self-care, NICE recommend considering pharmacological management based on symptom type and severity, and the use of psychological therapies where symptoms have persisted for more than 12-months.

Trials, systematic reviews, and meta-analyses, suggest that some treatment modalities are helpful in reducing IBS symptom severity. However, many trials lack methodological rigour, thus the findings should be treated with caution. For instance, a limited number of studies have tested the effectiveness of the low Fermentable Oligo-, Di-, Mono-saccharides and Polypols (FODMAP) diet. While these studies report a reduction in symptom severity, the effects are similar to other interventions e.g. less-restrictive dietary advice (see Eswaran,

Chey, Han-Markey, Ball, & Jackson, 2016; Marsh, Eslick, & Eslick, 2016). In relation to pharmacological interventions, a Cochrane review offered some support for antidepressants, but little support for bulking agents and antispasmodics (Ruepert et al., 2011). In relation to psychological interventions, systematic reviews and meta-analyses have shown CBT to be efficacious in the short-term, with equivocal findings so far for longer-term outcomes (Li, Xiong, Zhang, Yu, & Chen, 2014; Zijdenbos, de Wit, van der Heijden, Rubin, & Quartero, 2009).

The NICE guidelines recommend clinicians not to encourage the use of acupuncture and reflexology, but between 20 and 50% of people with IBS use some form of complementary or alternative medicine (CAM) (Carmona-Sanchez & Tostado-Fernandez, 2004; Hung, Kang, Bollom, Wolf, & Lembo, 2015; Koloski, Talley, Huskic, & Boyce, 2003; Kong et al., 2005). Using CAM can be motivated by a lack of response to conventional treatments and the disabling nature of IBS symptomology (Hussain & Quigley, 2006; Wu, 2010). While recent evidence suggests some CAMs may be helpful (see for example Bensoussan et al., 2015; Cappello, Spezzaferro, Grossi, Manzoli, & Marzio, 2007; Manheimer et al., 2012) Wu's (2010) review found the poor quality of trials in this area precluded judgments as to their effectiveness.

Håkanson et al. (2009) and Jakobson Ung, Ringstrom, Sjövall, and Simrén (2013) have explored how individuals seek ways of coping with, and adjusting to, life with IBS. In these qualitative studies, interviewees were described as having an altered self-image due to symptoms like bloating and flatulence (Håkanson et al., 2009), wanting more autonomy in treatment decisions (Håkanson et al., 2009), coming to accept they could not be cured (Jakobson Ung et al., 2013), and seeking coping strategies to regain a sense of control in their lives (Håkanson et al., 2009; Jakobson Ung et al., 2013). They also described living a life revolving round 'periods of well-being interspersed with periods of deterioration and illness'

(Jakobson Ung et al., 2013; p.1482). Relatedly, Paterson's (2001) meta-synthesis described how living with IBS involves diametrically opposite sequences, in which individuals mainly focused on managing symptoms during flare-ups but on strategies to protect themselves from further relapses in symptom-free times.

The idea that symptom experiences shape coping strategies has been formalised in the Common Sense Model (Diefenbach & Leventhal, 1996; Leventhal, Meyer, & Nerez, 1980; Leventhal, Nerenz, & Steele, 1984). According to this model, when people experience symptoms they develop cognitive and affective representations that drive coping strategies including treatment-seeking. The experience and effects of treatment are then appraised, and inform modifications to illness representations, treatment utilisation, or both (Diefenbach & Leventhal, 1996; Horne, 2003; Horne & Weinman, 2002; Leventhal et al., 1980, 1984). The criteria by which patients appraise treatments may vary by treatment and/or condition (Dima et al., 2013); for example, the therapist might be particularly important in shaping appraisals of complementary therapies (Bishop, Yardley, Cooper, Little, & Lewith, 2017; Yardley, Sharples, Beech, & Lewith, 2001) while beliefs about necessity and concerns are important for medications (Horne et al., 2013).

The Common Sense Model has been applied in IBS, but the focus thus far has been on the role of illness perceptions rather than treatment appraisals. De Gucht (2015) found the impact of increased symptom severity on reduced health-related quality of life was partially mediated by the illness perception dimensions of identity, consequences, and emotional representation. Rutter and Rutter (2002) found higher rates of anxiety and depression were strongly associated with perceiving IBS as having severe consequences. Riedl et al. (2009) found that people who attributed their IBS to psychological factors had a better quality of life than those with somatic attributions. While qualitative studies have explored patients' experiences of IBS in general, no in-depth studies have explicitly focused on how patients

experience and appraise treatments. It is important to explore how patients experience and appraise treatments for IBS because of the treatment context faced by patients: a variety of potential modalities which offer limited symptom relief that are not all widely available on the NHS.

This paper reports the findings from a qualitative study nested within a three-armed randomised controlled trial of therapist- and web-based CBT vs treatment as usual for IBS (citation removed for peer review). The aim was to explore how patients with refractory IBS seek and appraise different treatment modalities tried prior to entering the trial. Patients' experiences of CBT in the trial will be reported elsewhere.

Method

Design

This qualitative study was nested within a large trial (summarised below) and used a critical realist theoretical framework (Bhaskar, 1975; Gerrits & Verweij, 2015). Semi-structured interviews were conducted with a subsample of participants drawn from each arm of the trial on completing trial treatments (3 months post-baseline). Adopting an inductive and thematic approach permitted us to compare themes across individuals and groups of people (e.g. genders, IBS severity scores, primary and secondary care) as well as analysing key themes across the whole dataset.

The Parent Trial

The main trial randomised patients to receive therapist-delivered CBT, web-based CBT or treatment-as-usual (see Table 1 for summary, and (citation removed for peer review) for full description of interventions). Eligible patients were diagnosed with refractory IBS fulfilling the Rome III criteria (Drossman, 2006) and were aged 18 years or over (for full details of trial methods see (citation removed for peer review)).

Participants

Maximum variation sampling was employed to interview people with a diverse range of characteristics: age, gender, ethnicity, geographical location, study arm, symptom severity scores, and from primary and secondary care.

Fifty-two interviews were conducted, 42 by XX and 10 by XX. Interviewees were aged from 21 to 74 years (M = 40.67, SD = 14.05) and had IBS for an average of 16.26 years (SD = 9.96). Table 2 summarises interviewees' characteristics.

Interviews

Semi-structured interviews used a topic guide comprising broad, open-ended questions clustered into three sections: experiences of the trial to date, treatment regimens for IBS, and daily experiences of emotions (findings from the latter have been published separately; see (citation removed for peer review)). This paper focuses on interviewee responses to questions exploring past treatment regimens for IBS. Questions included "could you tell me about the most helpful/least helpful treatments you have tried for your IBS?" and "What did you like/dislike about these treatments?" These questions did not explore the interviewees' experiences of CBT or treatment-as-usual received during the trial. Interviews lasted on average 56 minutes (range 23 to 116) and were conducted face-to-face (n = 10) or over the telephone (n = 42), as per participant request.

Procedure

Prior to commencing the study, favourable NHS ethical clearance was received (ref: Berkshire REC 13/SC/0206). At the start of the trial, informed consent for interview participation was obtained. Before commencing each interview, interviewers built rapport, reminded interviewees of their rights, and obtained verbal consent. Interviews were digitally recorded, then transcribed and coded using NVivo (version 10; QSR International Ltd., 2012). Interviewers made field notes (e.g. observations of non-verbal aspects) to inform later

analysis and document their own reflections. All participant names have been anonymised to protect confidentiality.

Data Analysis

Thematic analysis was used to identify themes (Joffe & Yardley, 2004), and followed the procedure espoused by Braun and Clarke (2013). To achieve familiarisation with the data, interviews were listened to and transcripts read repeatedly. Memos were written to capture the researcher's subjective thoughts and feelings, and preserve ideas that may become significant later in the analysis (Polit & Beck, 2004; Speziale & Carpenter, 2007). To generate initial themes based on the data, XX read each transcript and attached newly devised labels to phrases and small chunks of data that addressed the research question. After conducting open-coding in this way on five transcripts, all labels and associated data excerpts were collated and reviewed. This process identified a large number of codes which were used to code the remaining transcripts, adding more codes when new ideas were encountered in the data.

Codes were defined in a coding manual and clustered around common themes; clusters were identified by comparing different codes and associated data excerpts.

Preliminary themes were defined, diagrammed (in thematic maps), and reviewed against transcripts to ensure coherence and consistency with the dataset overall. Other researchers were involved at this stage (XX, XX) to discuss the themes and suggest alternative interpretations of the data, thus ensuring the analysis was neither idiosyncratic nor inappropriately selective. Themes were modified and discussed iteratively and finalised when the team agreed they captured the interviewees' experiences of previous IBS treatments.

We ran queries in NVivo to explore similarities and differences between groups of interviewees (Bazeley & Jackson, 2014). For example, a "matrix query" explored how

interviewees in the different trial arms experienced pharmacological treatments. Overall, these queries suggested that experiencing and appraising treatments was similar across interviewees with different characteristics and from the different trial arms. Therefore, these queries are reported no further.

Study Rigour

To enhance the quality and rigour of this study we followed Lincoln & Guba's guidelines (1985). Trustworthiness was enhanced through keeping a clear audit trail and having regular discussions of emerging themes and findings within the research team.

Maximum variation sampling helps to increase confidence that we have captured major themes of importance to a diverse sample of people seeking help for recurring IBS symptoms. Writing memos and field notes facilitated reflexivity and enhanced transparency and confirmability. The overarching theme ("being trapped within a vicious cycle") was reminiscent of CBT concepts, prompting a reflexive exploration of whether CBT concepts had been imposed by the researchers. The lead analyst (XX) was a mature male postgraduate health psychology student, with no formal CBT training. Other researchers were trainee and experienced health psychologists with and without CBT and clinical experience and an academic GP with expertise in IBS. Before settling on the final themes we deliberately reviewed the data and thus confirmed that the 'vicious cycle' concept had indeed emerged from participants' accounts.

Findings

Interviewees described an everyday life compromised by an illness that, whilst not life-threatening or terminal, often had debilitating consequences for professional, personal, family and social domains alike.

"IBS can be like – a complete disaster in your life. ... people don't associate with it – with – a condition that is – like really debilitating and I think – its just like very destructive in your life." (Elijah)

Accounts of treatment seeking for IBS were characterised by a sense of being trapped within a "vicious cycle" of alternating hope (for new treatments) and despair (on finding them ineffective). Some interviewees, such as Lucas, discussed how this vicious cycle impacted them emotionally.

"I was anxious about being unwell and that caused me anxiety and made unwell, which caused me anxiety, so there was a bit of a vicious circle going on and any amounts of – of – of – telling me – or telling myself – that this is er something that will go away and it wasn't serious or whatever, um [didn't] break that cycle." (Lucas)

While a few interviewees escaped this cycle through increased acceptance of IBS and improved self-management, others described a constant battle to control symptoms and a seemingly unending quest for a cure. Typically, participants had tried multiple interventions before enrolling in the trial, and appraised pharmaceutical, dietary, and alternative treatments in different ways. Figure 1 depicts the interplay between the themes and subthemes, described below with selected illustrative quotes. In the text below and Figure 1, main themes are depicted in bold, sub-themes in italics.

Desperation for a cure and hope for positive effects

On seeking treatment for IBS, participants described desperation for a cure that manifested in a willingness to try anything, if there was even the slightest chance it could

offer some relief from symptoms. While they focused mainly on "quick fixes" offered by medicines, non-pharmaceutical alternatives were considered. To identify potential treatments, participants drew on *recommendations and advice from diverse sources* including healthcare professionals, friends and family, fellow patients, and the internet.

"Well most of the treatments I've tried have either been through friends of friends of friends or have been recommended because someone in a chat room has recommended them and – so when you're desperate, you will try – oh I'll give that a go." (Sophia)

Interviewees then had to manage their hope for positive effects from a new treatment. Some *resisted the temptation to hope for a cure* (particularly when they had extensive histories of treatment-seeking), despite hearing success stories from other patients. Others found that *success stories and recommendations encouraged them to hope for a cure*:

"I had expectations that it would wave a magic wand overnight" (Grace)

Appraising the effects of diverse treatments

Having engaged with a treatment, interviewees described appraising it for its helpfulness in relieving symptoms and offering physiological and psychological benefits. When treatments were appraised as helpful, participants regained a sense of control in their quality of life, and could begin breaking the vicious cycle. Finding a treatment modality that relieved symptoms such as bloating in the short-term allowed interviewees to enjoy a social life with friends and families and take less time off work. More commonly, participants were disappointed with treatment effects and continued seeking a more effective treatment.

Medications

Medications were the most frequently appraised interventions. Some participants described how medications offered *temporary symptom relief* (e.g. from bloating and stomach cramps) that meant they *regained some control* and were better able to socialise and perform daily activities without worrying that their symptoms would interrupt or embarrass them. Indeed, such *worries could be all-encompassing and disabling* in themselves so the relief from worry was valued as well as the relief from symptoms.

"It's made my life easier in that respect, that I don't get caught out in situations where I would have been caught out before. So it's a relief that you can get on and not worry about it." (Jessica)

When over-the-counter medications and prescribed medications were found to be unhelpful in that symptom relief was not forthcoming, interviewees often persisted in trying different remedies and typically remained open to their potential benefits for others:

"Okay, well – none of them really helped so I didn't – I didn't really like any of them.

Yes – they just – they did not help my – my troublesome symptoms, the bloating and the trapped wind at night, so you know, I tried all of them for, whatever, a month or some of them I tried for longer and tried – on – you know – separate occasions." (Alice)

Over half of all participants expressed a general *dislike of taking medications* for their IBS, citing the following reasons: tablets difficult to swallow, inconvenience of having to take the medication at very specific times, concerns about falling foul of legal restrictions when travelling, childhood upbringing was generally anti-medications, concerns over

immediate and longer-term side-effects, feeling that medications treated (or masked) the symptoms without addressing underlying causes, and not understanding what they were putting into their bodies.

"I don't like taking drugs because I always wonder what – what side-effects are there that perhaps aren't apparent now, but you then find out, say, 10 or 20 years down the line for example." (Liam)

A general dislike of medications and/or finding them ineffective led many participants (42%) to seek other ways of managing IBS (although they didn't necessarily stop taking disliked medications if they provided some relief). Participants preferred alternatives to medication which treat IBS more *holistically* and avoid the use of chemicals, for example by managing their diet or working with a therapist.

"I just didn't like the fact that I would have to take medication for – for something that could possibly be controlled in other ways, through perhaps – work with a therapist or hypnotherapy or something like that." (Olivia)

Dietary advice

Unlike medications, dietary changes were seen to have a social context which shaped participants' appraisals of such interventions. Participants described experiencing an *altered relationship with food* which could be empowering (when it became a way of controlling symptoms) but also demanding. Trying to identify triggers involved something of a *trial and error approach*, and when trigger foods were identified this was experienced as a double-edged sword. On the one hand, it could enhance participants' sense of control in cases when

their symptoms improved. On the other hand, it could be burdensome and created additional anxieties, in that it required considerable forward planning, necessitated detailed attention to ingredients when food shopping or eating out, and impacted on participants' work, social, and family lives.

"My work involves a lot of travelling and not really any regular hours. So to get into any sort of routine with, say, food, is very tricky and doesn't leave much option for eating anything on the go, so everything has to be cooked in advance, prepared and brought with me." (Noah)

"I dislike that I have to eat differently to my family; I dislike that it's not readily available to buy things while I'm out with others." (Emily)

Managing symptoms through diet decreased participants' *enjoyment of food*.

Interviewees described finding food boring as they could only eat the same things, they disliked feeling unable to eat spontaneously, and they missed previously-enjoyed foods and previously-pleasurable aspects of food preparation.

"Also I decided that food is obviously something that's really nice to enjoy so it's just really sad when you – when you can't eat like half the foods that you used to eat before. So I found that really – like demoralising." (Elijah)

Furthermore, some participants reported having managed the demands of complex dietary changes but without success.

"Diet was just very imposing and no positive outcome. So you don't mind, you know, doing something that's restricting your life if you're going to get something out of it. I got zero out of it so that was frustrating." (Poppy)

CAM and other treatments

Twenty-four interviewees (N = 46%) described having *sought other options* including CAM, colonic pack for manual bowel evacuation, and exercise. While some of these approaches were valued for attempting to address root causes of IBS, and not being pharmacological, ultimately, they were appraised according to whether they elicited meaningful benefits. As for dietary advice and medications, alternatives that were found ineffective were simply seen as another failed attempt that led to frustration and a renewed search for other remedies.

"I've tried all sorts, I mean, you know, I've had tablets, I've been to the pain clinic and tried mindfulness meditation; I've paid for hypnotherapy, I've paid for acupuncture, paid for Chinese medicine, I've been to homoeopaths, I've paid for that. I've tried all sorts and nothing – nothing works. I've had CBT in the past and it didn't work then. I've tried all sorts." (James)

When alternatives such as regular exercise were appraised more positively as helping with one's symptoms, participants also reported experiencing *challenges to adherence* including: lack of time and motivation, feeling lethargic, working long hours, and lacking enthusiasm for physical activities that were not inherently enjoyable.

"I just found it too – too energetic because my energy levels can be pretty low sometimes and I just felt – it wore me out too much, that I didn't really get pleasure in it, I suppose that's the word, I didn't find it was pleasurable." (Amelia)

Disappointment at lack of cure

Irrespective of their *hopes, expectations*, or type of intervention, interviewees described being disappointed when treatments provided neither a cure nor long-term symptom relief. Interviewees' desperation to find a cure was fuelled by continuing to experience symptom flare-ups with little or no ability to manage them, thus maintaining the vicious cycle of treatment seeking. For example, Isla described being obsessed with keeping herself regular because of the pain she experienced, and seeking different medications for pain relief.

"I was using a lot of over-the-counter laxatives and some of them very strong, and I was just obsessed with taking them, just to try and keep myself regular because I was in so much pain. So I would try these ones — which did work but — they would work but they would not relieve the pain. So then I tried taking the other ones that were more [associated] with relieving the pain and then these actually never worked; I was always in pain." (Isla)

There were additional consequences of having tried ineffective treatments that both contributed to and were fuelled by disappointment in treatments. *Feelings of being exploited* emerged when participants found treatments to be expensive and then ineffective, and were perpetuated by the constant email bombardment from companies offering products that promised to provide relief from IBS symptoms.

"it's costing all the time, you know, you're laying out a lot of money which you might not mind if something's really gone well. But to keep laying out money and, in the end, you're no different." (Phoebe)

A lack of confidence in healthcare professionals sometimes emerged when participants felt they were being treated as a "case of IBS" rather than a unique individual person with IBS, when they felt they were not being treated respectfully, when they felt IBS was dismissed as not serious or "all in the mind", and when they perceived that clinicians had taken a trial and error approach (to prescribing medications in particular). This could also decrease participants' hope for an effective treatment.

"you suddenly realise – you are an individual and a lot of doctors want to put you in one box and treat you for one specific thing – they don't look at you as an individual, they look at you as – oh – you take that medication, blah, blah, blah, follow this routine and you might be cured." (Amelia)

"I felt a bit hopeless, to be honest xxx. (I: Yes) I tried quite a few things and I thought

- if the doctor can't get it right – what hope have I got." (Daisy)

Overall, confidence in a healthcare professional's ability to help cure or find symptom relief appeared to wane when participants' hopes for success were repeatedly met with disappointment and at times despair. It is however important to note that not all participants described losing confidence in healthcare professionals, and *more positive appraisals of*

clinicians tended to emerge after effective treatments, helpful referrals, and respectful discussions that included providing a rationale for any prescriptions.

"and the doctor prescribed that and she was a brilliant doctor and I think, as well, when the doctor has some confidence, you actually kind of believe in the drug a bit more. She had her reasons, she explained to me why she was prescribing it, so then I understood the point of it, not just chucking another prescription at me and telling me to go away." (Sophia)

On experiencing repeated failed interventions, participants began *thinking negatively* about themselves and the impact IBS had on their quality of life. IBS was seen as a source of personal embarrassment because of the perceived stigma around it, and because of uncontrollable bodily reactions. Treatments that offered some relief could also trigger negative thoughts, for example about the *need to rely on medication* to help relieve symptoms and the connotations of using antidepressant medications.

"I mean, it's basically – what's it called a ... tricyclic antidepressant. Now, I'm not depressed by any stretch of the imagination, I was just a bit – other than the fact that when your IBS [flares up], yes, you get down because – constant trips to the bathroom and obviously the way how it makes you feel physically. But other than that – if I didn't have my IBS, I'd be a perfectly happy person." (Liam)

Developing Acceptance and Coping Strategies

Some participants had found coping strategies that enabled them to begin to break out of the vicious cycle of treatment seeking. This occurred when participants, such as Jessica,

felt they had gained a degree of control over their lives, and/or came to *understand IBS as a long-term health condition* without a permanent "cure".

"just coming to terms with the fact that it's a condition that's with people forever and er you just have to try and control it as best you can and there will always be er flare-ups and um days that are not so good and you just have to – you just have to accept that." (Jessica)

When participants accepted that they had a long-term condition for which there appeared to be no cure, they seemed better able to resist the temptation to continue seeking out new treatments in the hope of a magic cure. Instead of seeking an instant cure, participants took other steps to manage or cope with their symptoms. These included identifying and *avoiding food triggers, stopping or adjusting dosages of medications, maintaining a routine* to reduce feelings of stress, and *increasing exercise*.

"I've it had a long time anyway, it's not curable; you will try anything but actually the bottom line is – it's only one or two small things that really do work – and it's better just to stick with them. I see new things come up all the time and I think about them, but, you know, I think – well actually – I'm not going to rock the boat and take something new because somebody said, oh that's really good – and they make things worse." (Genevieve)

For some interviewees, *becoming more aware of their bodies* and how their symptoms manifest was enough for them to find temporary escape from the vicious cycle that had engulfed their lives. For Poppy, learning more about herself through the "lightning"

process" (designed to train people to understand mind-body interactions) was an empowering process that helped her to cope with her IBS.

"I'm now able to see my triggers. I am now able – to control myself and my emotions a lot more, take the stress out of my life. I've now got a huge amount of awareness about myself and how I react to situations. ... So – it's – empowering me as a person, it's saying use the tools and you can help yourself – which is really empowering."

(Poppy)

Finally, the decision by interviewees to enrol into the trial fits in with their desire and desperation to find symptom relief on the one hand; and on the other, for those who have managed to regain some control in their lives, the ability to help develop further tools and a stronger capacity to self-manage, as both Isla and Amelia explain.

"I agreed to do it because, as I said, I was looking for perhaps another tool; I find this is another tool to help me through what I was experiencing" (Amelia)

"probably over a year of seeing different doctors and consultants and not finding any solution to my – to my problem, so it was basically as like a last remedy thing ... I was not very optimistic about it" (Isla)

Discussion

In this study we explored how individuals with refractory IBS seek and go about appraising different treatment modalities. The findings suggest that people primarily appraise treatment in terms of its perceived impact on reducing symptom severity but also in terms of

how well it fits within and improves (or not) their personal, social, and professional lives.

However, this must be understood within the broader context of treatment seeking

behaviours, wherein interviewees described being trapped within a vicious cycle of hope and

despair for a range of different treatment modalities seen as potential cures.

A desperation and willingness drove interviewees to try any treatment modality available if it offered potential relief. After a period of time, interviewees appraised the treatment modality for its effects on symptoms and quality of life while also taking into account, but rarely prioritising, other dimensions including: convenience of the regimen itself, whether it sought to address the perceived root causes of IBS, perceived side-effects, and cost. The Common Sense Model posits a bi-directional relationship between beliefs about a treatment and appraisals, whether positive (improvement in symptoms) or negative (side-effects, or symptoms persist; Diefenbach & Leventhal, 1996). Therefore, if the treatment modality proves beneficial it is predicted that individuals are more likely to continue engaging with it, and in turn strengthen their beliefs about the treatment modality as useful in relieving symptoms. In our interviews, people who found the treatment modality offered some symptom relief, even if it was only in the short-term, were prepared to continue with it, and in some cases, this was described as 'life-saving'. Often, but not always, this was true even when people found a treatment to be difficult to adhere to or to have unpleasant or unwanted side-effects. For example, whilst diet was seen as a potentially helpful intervention, interviewees did not find it necessarily easy to adhere to. As Casiday, Hungin, Cornford, de Wit, and Blell (2009) note, managing strict dietary regimens was time consuming and frustrating. For Horne (2006) this represents a 'common-sense' approach to a necessity-concerns dilemma, whereby a highly valued outcome outweighs problematic aspects of treatment and perceived self-efficacy to maintain a treatment modality becomes important.

For those trapped within the vicious cycle, disappointment at not being able to find a way to reduce symptoms and improve quality of life contributed to negative self-perceptions, feelings of being exploited by marketers, and reduced confidence in healthcare professionals. Individuals wanted to have faith in healthcare professionals such as GPs and consultants who were often perceived as holding a lifeline to curing illnesses; when they were unable to provide the answers, interviewees felt helpless and frustrated. Disappointing experiences with healthcare professionals also contributed to negative self-perceptions, when people felt their symptoms were not being taken seriously or they were not treated as an individual. Of concern is that the development of negative self-perceptions may further diminish people's ability to cope with flare-ups, by reducing self-efficacy and expectations of response efficacy over time.

Similar reactions have been noted in chronic pain conditions. A meta-synthesis found that patients with chronic low back pain cycled through hope and despair, were left frustrated and disappointed when they felt disbelieved by health care professionals and others, and over time developed more negative perceptions of self and the future (Froud et al., 2014). Some of these challenges faced by people with chronic pain may result from not easily fitting within a traditional biomedical model in which diagnosis leads to curative treatment (Toye et al., 2013). Indeed, patients often expect a prescription aimed to alleviate symptoms or cure disease and healthcare professionals are aware of those expectations (Cole, 2014; Teixeira Rodrigues, Roques, Figueiras, & Herdeiro, 2013). Individuals with IBS in the current study felt a similar alienation from the biomedical model, in that a cure has not followed on from diagnosis and various treatment modalities.

Within our interviews, the primary route out of the cure-seeking vicious cycle was through an acceptance that there is no cure for IBS. For interviewees in the current study, developing acceptance and coping strategies seemed to increase self-efficacy to manage

periods of flare-ups and provide a protective barrier against despair when a treatment ceased to reduce symptoms. Similarly, Jakobson Ung et al. (2013)'s interviewees - who had lived with IBS for a long time (on average 24 years) - were able to see themselves as 'healed but not cured' and were able to gain a sense of control in their daily lives. Acceptance and mastery have also been shown to be important in facilitating coping and reducing unhelpful cure-seeking in other long-term conditions (see Froud et al., 2014; Garcia-Rueda, Carvajal Valcarcel, Saracibar-Razquin, & Arantzamendi Solabarrieta, 2016; Toye et al., 2013). For example, low back pain patients who accepted their condition might not be curable and changed their outlook accordingly, were better able to cope with their back pain (Froud et al, 2014).

This study has certain methodological strengths and weaknesses. Strengths include: the use of maximum variation sampling to ensure a broad range of people were interviewed; the requirement for all interviewees to meet the Rome III criteria (Drossman, 2006) for IBS; and the use of established techniques to enhance analytic rigour. However, it is important to bear in mind that interviewees all came from the trial (citation removed for peer review), and so all had a history of unsuccessful treatments from primary and/or secondary care. This means that our participants are very likely to have had more unsuccessful or disappointing experiences of IBS treatments in the past compared to a community-based sample of people with IBS. At the time of interview, our participants had been in the trial for 3 months: this might have shaped their reflections on treatment seeking. Further, whilst this paper did not explore interviewees' experiences of CBT, their participation in a CBT trial itself indicates an openness to CBT (and potentially other non-medication-based interventions) and ongoing treatment seeking.

The findings suggest some clinical implications. Clinicians could encourage patients to reconceptualise IBS as a condition which they can help to manage themselves with the

right tools. This change in patients' perceptions of their IBS has not been a central focus of clinical guidelines. Our findings suggest strengthening the message that IBS is a relapsing remitting condition, which can persist but can benefit from active self-management could have potential benefit in breaking the 'vicious cycle' of desperately seeking treatment and repeated disappointment. Promisingly, Robinson et al. (2006) found educating IBS patients with a self-help guidebook significantly reduced perceived symptom severity and reduced primary care consultations by 60% compared to controls.

While symptom reduction appears to be highly valued by many, other outcomes such as regaining a sense of control and rediscovering pleasure in food may also be important to individuals. Initiating dialogue about treatment goals may help to foster better patient-practitioner interactions in IBS consultations. Such discussions may also enable tailoring of proposed management strategies to individuals with IBS, focussing on what is important to them, for example being able to live a valued life despite symptoms. Dialogue about treatment-related values could also help patients to feel supported in treatment seeking and encourage treatment choices that are based on a more informed appreciation of the various costs and benefits of specific medications such as anti-depressants as well as non-pharmacological interventions.

In conclusion, this qualitative study has illustrated how individuals with IBS seek and appraise treatments in the context of their personal, social, and professional lives, while constantly striving for symptom relief. Treatments are experienced on an emotional rollercoaster of hope through to despair, which for some can be time-consuming and economically costly. Supportive discussions about illness perceptions and treatment beliefs during clinical encounters with health care professionals could improve patients' experiences.

REFERENCES

- Bazeley, P., & Jackson, K. (2014). *Qualitative Data Analysis with NVivo*. London: SAGE Publications.
- Bensoussan, A., Kellow, J. E., Bourchier, S. J., Fahey, P., Shim, L., Malcolm, A., & Boyce,
 P. (2015). Efficacy of a Chinese Herbal Medicine in Providing Adequate Relief of
 Constipation-predominant Irritable Bowel Syndrome: A Randomized Controlled Trial.
 Clinical Gastroenterology and Hepatology, 13(11), 1946–1954.e1.
 https://doi.org/10.1016/j.cgh.2015.06.022
- Bhaskar, R. (1975). Feyerabend and bachelard: two philosophies of science. *New Left Review*, 0(94), 31–56.
- Bishop, F. L., Yardley, L., Cooper, C., Little, P., & Lewith, G. (2017). Predicting adherence to acupuncture appointments for low back pain: a prospective observational study. *BMC Complementary and Alternative Medicine*, *17*(5), 1–12. https://doi.org/10.1186/s12906-016-1499-9
- Braun, V., & Clarke, V. (2013). Successful qualitative research: A practical guide for beginners. London: SAGE Publications.
- Cappello, G., Spezzaferro, M., Grossi, L., Manzoli, L., & Marzio, L. (2007). Peppermint oil (Mintoil) in the treatment of irritable bowel syndrome: A prospective double blind placebo-controlled randomized trial. *Digestive and Liver Disease*, *39*(6), 530–536. https://doi.org/10.1016/j.dld.2007.02.006
- Carmona-Sanchez, R., & Tostado-Fernandez, F. A. (2004). Prevalence of use of alternative and complementary medicine in patients with irritable bowel syndrome, functional dyspepsia and gastroesophageal reflux disease. *Revista de Gastroenterología de México*, 70(4), 393–398.
- Casiday, R. E., Hungin, A. P. S., Cornford, C. S., de Wit, N. J., & Blell, M. T. (2009). Patients' explanatory models for irritable bowel syndrome: symptoms and treatment more important than explaining aetiology. *Family Practice*, 26(1), 40–47. https://doi.org/10.1093/fampra/cmn087
- Cole, S. T. (2014). Who will develop new antibacterial agents? *Philosophical Transactions* of the Royal Society B: Biological Sciences, 369(1645), 20130430. https://doi.org/10.1098/rstb.2013.0430
- Diefenbach, M. A., & Leventhal, H. (1996). The common-sense model of illness representation: theoretical and practical considerations. *Journal of Social Distress and*

- the Homeless, 5(1), 11–38. https://doi.org/10.1007/BF02090456
- Dima, A., Lewith, G. T., Little, P., Moss-Morris, R., Foster, N. E., & Bishop, F. L. (2013). Identifying patients' beliefs about treatments for chronic low back pain in primary care: a focus group study. *British Journal of General Practice*, *63*(612), e490–e498. https://doi.org/10.3399/bjgp13X669211
- Drossman, D. A. (2006). The Functional Gastrointestinal Disorders and the Rome III Process. *Gastroenterology*, *130*(5), 1377–1390. https://doi.org/10.1053/j.gastro.2006.03.008
- Drossman, D. A. (2016). Functional gastrointestinal disorders: history, pathophysiology, clinical features, and Rome IV. *Gastroenterology*, *150*, 1262-1279. http://dx.doi.org/10.1053/j.gastro.2016.02.032
- El-Serag, H. B., Olden, K., & Bjorkman, D. (2002). Health-related quality of life among persons with irritable bowel syndrome: a systematic review. *Alimentary Pharmacology & Therapeutics*, *16*(6), 1171–1185. https://doi.org/10.1046/j.1365-2036.2002.01290.x
- Eswaran, S. L., Chey, W. D., Han-Markey, T., Ball, S., & Jackson, K. (2016). A Randomized Controlled Trial Comparing the Low FODMAP Diet vs. Modified NICE Guidelines in US Adults with IBS-D. *The American Journal of Gastroenterology*, *111*(12), 1824–1832. https://doi.org/10.1038/ajg.2016.434
- (citation removed for peer review)
- Froud, R., Patterson, S., Eldridge, S., Seale, C., Pincus, T., Rajendran, D., ... Underwood, M. (2014). A systematic review and meta-synthesis of the impact of low back pain on people's lives. *BMC Musculoskeletal Disorders*, *15*(1), 50. https://doi.org/10.1186/1471-2474-15-50
- Garcia-Rueda, N., Carvajal Valcarcel, A., Saracibar-Razquin, M., & Arantzamendi Solabarrieta, M. (2016). The experience of living with advanced-stage cancer: a thematic synthesis of the literature. *European Journal of Cancer Care*, 25(4), 551–569. https://doi.org/10.1111/ecc.12523
- Gerrits, L. M., & Verweij, S. (2015). Critical realism as a meta-framework for understanding the relationships between complexity and qualitative comparative analysis. *Journal of Critical Realism*, *12*(2), 166–182. https://doi.org/10.1179/rea.12.2.p663527490513071
- Håkanson, C., Sahlberg-Blom, E., Nyhlin, H., & Ternestedt, B. M. (2009). Struggling with an unfamiliar and unreliable body: the experience of irritable bowel syndrome. *Journal of Nursing and Healthcare of Chronic Illness*, *I*(1), 29–38. https://doi.org/10.1111/j.1365-2702.2008.01001.x
- Horne, R. (2003). Treatment perceptions and self-regulation. In L. Cameron & H. Leventhal

- (Eds.), *The self-regulation of health and illness behaviour* (pp. 138–153). New York: Routledge.
- Horne, R. (2006). Beliefs and adherence to treatment: the challenge for research and clinical practice. In P. W. Halligan & M. Aylward (Eds.), *The Power of Belief: Psychosocial Influence on Illness, Disability and Medicine* (pp. 115–136). Oxford: Oxford University Press.
- Horne, R., Chapman, S. C. E., Parham, R., Freemantle, N., Forbes, A., & Cooper, V. (2013). Understanding patients' adherence-related Beliefs about Medicines prescribed for long-term conditions: A meta-analytic review of the Necessity-Concerns Framework. *PLoS ONE*, 8(12), e80633. https://doi.org/10.1371/journal.pone.0080633
- Horne, R., & Weinman, J. (2002). Self-regulation and self-management in asthma: exploring the role of illness perceptions and treatment beliefs in explaining non-adherence to preventer medication. *Psychology and Health*, *17*(1), 17–32. https://doi.org/10.1080/08870440290001502
- Hung, A., Kang, N., Bollom, A., Wolf, J. L., & Lembo, A. (2015). Complementary and Alternative Medicine Use Is Prevalent Among Patients with Gastrointestinal Diseases. *Digestive Diseases and Sciences*, 60(7), 1883–1888. https://doi.org/10.1007/s10620-014-3498-3
- Hussain, Z., & Quigley, E. M. M. (2006). Systematic review: Complementary and alternative medicine in the irritable bowel syndrome. *Alimentary Pharmacology and Therapeutics*, 23(4), 465–471. https://doi.org/10.1111/j.1365-2036.2006.02776.x
- Jakobson Ung, E., Ringstrom, G., Sjövall, H., & Simrén, M. (2013). How patients with long-term experience of living with irritable bowel syndrome manage illness in daily life: a qualitative study. European Journal of Gastroenterology & Hepatology, 25(12), 1478–1483.
- Joffe, H., & Yardley, L. (2004). Content and thematic analysis. In D. F. Marks & L. Yardley (Eds.), *Research methods for clinical and health psychology* (pp. 56–68). London: SAGE Publications.
- Koloski, N. A., Talley, N. . J., Huskic, S. S., & Boyce, P. M. (2003). Predictors of conventional and alternative health care seeking for irritable bowel syndrome and functional dyspepsia. *Alimentary Pharmacology and Therapeutics*, *17*(6), 841–851. https://doi.org/10.1046/j.0269-2813.2003.01498.x
- Kong, S. C., Hurlstone, D. P., Pocock, C. Y., Walkington, L. A. Farquharson, N. R., Bramble, M. G., McAlindon, M. E., & Sanders, D. S. (2005). The Incidence of self-

- prescribed oral complementary and alternative medicine use by patients with gastrointestinal diseases. *Journal of Clinical Gastroenterology*, *39*(2), 138–141.
- Leventhal, H., Meyer, D., & Nerez, D. (1980). The common sense model of illness danger. In S. Rachman (Ed.), *Medical Psychology Volume 2* (pp. 7–30). New York: Pergamon.
- Leventhal, H., Nerenz, D. R., & Steele, D. F. (1984). Illness representations and coping with health threats. In A. Baum & J. Singer (Eds.), *A Handbook of Psychology and Health* (pp. 219–252). Hillsdale, NJ: Erlbaum.
- Li, L., Xiong, L., Zhang, S., Yu, Q., & Chen, M. (2014). Cognitive—behavioral therapy for irritable bowel syndrome: A meta-analysis. *Journal of Psychosomatic Research*, 77(1), 1–12.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Beverley Hills, California: SAGE Publications.
- Lovell, R. M., & Ford, A. C. (2012). Global prevalence of and risk factors for irritable bowel syndrome: a meta-analysis. *Clinical Gastroenterology and Hepatology*, *10*(7), 712–721.
- Manheimer, E., Cheng, K., Wieland, L. S., Min, L. S., Shen, X., Berman, B. M., & Lao, L. (2012). Acupuncture for treatment of irritable bowel syndrome. *Cochrane Database of Systematic Reviews*, *CD005111*(5). https://doi.org/10.1002/14651858.CD005111.pub3
- Marsh, A., Eslick, E. M., & Eslick, G. D. (2016). Does a diet low in FODMAPs reduce symptoms associated with functional gastrointestinal disorders? A comprehensive systematic review and meta-analysis. *European Journal of Nutrition*, *55*(3), 897–906. https://doi.org/10.1007/s00394-015-0922-1
- Michalsen, V. L., Vandvik, P. O., & Farup, P. G. (2015). Predictors of health-related quality of life in patients with irritable bowel syndrome. A cross-sectional study in Norway. Health and Quality of Life Outcomes, 13(1), 113–122. https://doi.org/10.1186/s12955-015-0311-8
- NICE. (2008). Irritable bowel syndrome in adults: diagnosis and management (CG61). London.
- Paterson, B. L. (2001). The shifting perspectives model of chronic illness. *Journal of Nursing Scholarship*, *33*(1), 21–26.
- Polit, D. F., & Beck, C. T. (2004). *Nursing Research. Principles and Methods* (7th ed.). Philadelphia: Lippincott Williams & Wilkins.
- QSR International Ltd. (2012). NVivo Qualitative Data Analysis Software. QSR International Ltd. Retrieved from http://www.qsrinternational.com/products_nvivo.aspx
- Quigley, E. M. M., Bytzer, P., Jones, R., & Mearin, F. (2006). Irritable bowel syndrome: The

- burden and unmet needs in Europe. *Digestive and Liver Disease*, *38*(10), 717–723. https://doi.org/10.1016/j.dld.2006.05.009
- Riedl, A., Maass, J., Fliege, H., Stengel, A., Schmidtmann, M., Klapp, B. F., & Mönnikes, H. (2009). Subjective theories of illness and clinical and psychological outcomes in patients with irritable bowel syndrome. *Journal of Psychosomatic Research*, 67(5), 449–455.
- Robinson, A., Lee, V., Kennedy, A., Middleton, L., Rogers, A., Thompson, D. G., & Reeves, D. (2006). A randomised controlled trial of self-help interventions in patients with a primary care diagnosis of irritable bowel syndrome. *Gut*, *55*(5), 643–648. https://doi.org/10.1136/gut.2004.062901
- Ruepert, L., Quartero, A. O., de Wit, N. J., van der Heijden, G. J., Rubin, G., & Muris, J. W. M. (2011). Bulking agents, antispasmodics and antidepressants for the treatment of irritable bowel syndrome. *Cochrane Database of Systematic Reviews*, 8. https://doi.org/10.1002/14651858.CD003460.pub3
- Schoenfeld, P. (2005). Efficacy of current drug therapies in irritable bowel syndrome: What works and does not work. *Gastroenterology Clinics of North America*, *34*(2 SPEC. ISS.), 319–335. https://doi.org/10.1016/j.gtc.2005.02.002
- (citation removed for peer review)
- Speziale, H. S., & Carpenter, D. R. (2007). *Qualitative Research in Nursing: Advancing the Humanistic Imperative* (4th ed.). Philadelphia: Lippincott Williams & Wilkins.
- Taft, T. H., Ballou, S., & Keefer, L. (2013). A preliminary evaluation of internalized stigma and stigma resistance in inflammatory bowel disease. *Journal of Health Psychology*, *18*(4), 451–460. https://doi.org/10.1177/1359105312446768
- Taft, T. H., Keefer, L., Artz, C., Bratten, J., & Jones, M. P. (2011). Perceptions of illness stigma in patients with inflammatory bowel disease and irritable bowel syndrome. *Quality of Life Research*, 20(9), 1391–1399. https://doi.org/10.1007/s11136-011-9883-x
- Taft, T. H., Riehl, M. E., Dowjotas, K. L., & Keefer, L. (2014). Moving beyond perceptions: internalized stigma in the irritable bowel syndrome. *Neurogastroenterology & Motility*, 26(7), 1026–1035. https://doi.org/10.1111/nmo.12357
- Teixeira Rodrigues, A., Roques, F., Figueiras, A., & Herdeiro, M. T. (2013). Understanding physician antibiotic prescribing behaviour: A systematic review of qualitative studies. *International Journal of Antimicrobial Agents*, 41(3), 203–212. https://doi.org/10.1016/j.ijantimicag.2012.09.003
- Toye, F., Seers, K., Allcock, N., Briggs, M., Carr, E., Andrews, J., & Barker, K. (2013). A meta-ethnography of patients' experience of chronic non-malignant musculoskeletal

- pain. *Health Services and Delivery Research*, *I*(12), 1–190. https://doi.org/10.3310/hsdr01120
- Wu, J. C. (2010). Complementary and alternative medicine modalities for the treatment of irritable bowel syndrome: facts or myths? *Gastroenterology & Hepatology*, 6(11), 705– 711.
- Yardley, L., Sharples, K., Beech, S., & Lewith, G. (2001). Developing a dynamic model of treatment perceptions. *Journal of Health Psychology*, 6(3), 269–282.
- Zijdenbos, I. L., de Wit, N. J., van der Heijden, G. J., Rubin, G., & Quartero, A. O. (2009).

 Psychological treatments for themanagement of irritable bowel syndrome. *Cochrane Database of Systematic Reviews*, 1(CD006442).

 https://doi.org/10.1002/14651858.CD006442.pub2

Table 1
Summary of the interventions received by each trial arm

	Therapist-based	Web-based CBT	Treatment as usual
	CBT		
Ongoing	Treatment as usual	Treatment as usual from	Treatment as usual from
intervention	from GP/consultant.	GP/consultant.	GP/consultant.
Main	Therapy based on a	Previously piloted web-	
Intervention	paper-based	based CBT self-	
	manual.	management programme	
		(Regul8; Everitt et al.,	
		2013).	
Intensity	Six, 60-minute	Eight online modules and	
	telephone CBT	three, 30-minute therapist	
	sessions over 12	delivered telephone	
	weeks.	sessions over 12 weeks.	
Additional	Two 1-hour booster	Two 30-minute booster	Upon completion of the
sessions	calls at 4- and 8-	calls at 4- and 8-months.	trial, participants
	months.		offered the trial CBT
			intervention.

Note: GPs and consultants were given a leaflet summarising the NICE guidelines for IBS

Table 2

Interviewees' Characteristics (n=52)

		N	%
Gender	Male	12	23.08
	Female	40	76.92
London	Primary Care	10	19.23
	Secondary Care	25	48.07
Southampton	Primary Care	15	28.85
	Secondary Care	2	3.85
Trial Arm	Therapist-based	17	32.69
	Web-based	17	32.69
	Treatment as usual	18	34.62
Trial Arm (Gender -	Therapist-based	4	7.69
Male)	Web-based	3	5.77
	Treatment as usual	5	9.62
Trial Arm (Gender -	Therapist-based	13	25.0
Female)	Web-based	14	26.92
	Treatment as usual	13	25.0
IBS SSS	Remission	4	7.69
	Mild	9	17.31
	Moderate	18	34.62
	Severe	21	40.38
Ethnicity	White British	38	73.08
	White Other	9	17.31
	White Asian	1	1.92

Treatment seeking and appraisal in irritable bowel syndrome

Note: IBS SSS = IBS Symptom Severity Score

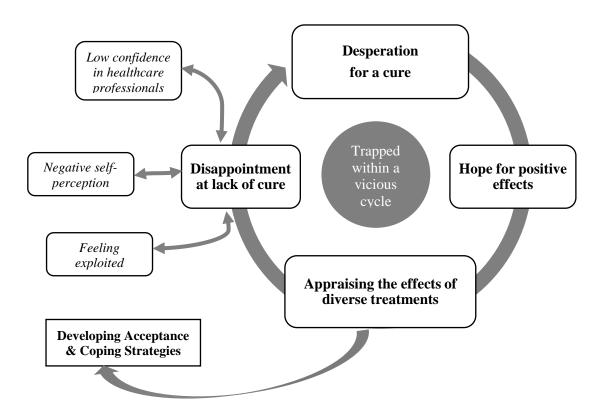


Figure 1. Thematic map depicting participants' experiences of seeking and appraising treatments in IBS

Note: Bold text represents main themes; Italic text indicates sub-themes