

Addressing obesity related self-stigma using inquiry-based stress reduction in the GP setting

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Abstract

Aims

Stigma and self-stigma are known to be important in relation to obesity. The aim of this study is to examine the feasibility/acceptability of utilising Inquiry Based Stress Reduction (IBSR) in the GP setting.

Methods

Observational study on a convenience sample of 10 individuals with severe spectrum obesity, invited to participate from a 4 GP Practice, delivering a moderately intensive intervention over 12 weeks, process including informed consent, with IBSR curriculum and delivery by three accredited IBSR facilitators, project co-ordination and initial / final evaluations conducted by a Clinical Psychologist (GW), including measurement of weight, Becks Depression Scale (BDI), Health Related Quality of Life (HRQoL), Weight Bias Internalisation Scale (WBIS), Weight Self-Stigma Questionnaire (WSSQ), and qualitative commentary from participants and study team.

Results

Of 22 initially invited, 14 commenced, 10 completed the intervention. Mean BMI was 42.8, mean age 49 years, F:M = 7:3,. Many believed obesity was their own fault, related very difficult interactions with the healthcare system, and valued opportunity to engage with the study. Despite their alarming levels of co-morbidity, participants were far more concerned regarding stigma and self-stigma. A statistically significant difference was observed in the WSSQ, where participants' post-intervention scores were significantly reduced ($Z = 2.293$, $p = 0.022$) (Table 2).

Discussion

Results and experience in practice indicate this approach is feasible and acceptable, and also will serve to inform a larger study in multiple general practices. Results also reflect the novel use of IBSR by people with severe spectrum obesity in relation to stigma and self-stigma.

Introduction

The importance of obesity in management of multimorbidity and non communicable diseases is critical ^{1, 2}. Knowledge regarding individual and population based solutions is evolving, including those deliverable in primary care ³, self-efficacy ⁴, and more recently stigma and self-stigma ^{5, 6, 7, 8} are known to be important in informing an effective clinical approach. There is increasing recognition of the value of inquiry based stress reduction (IBSR) (previously known as The Work of Byron Katie) ⁹⁻¹², in addressing self-stigma in a growing range of conditions ¹³⁻¹⁸. IBSR can now be viewed as both a delivered therapy, and as a transferrable set of reflective skills and insights with broad clinical applicability ¹⁹, valuable to the individual in reducing the impact of, and ‘turning around’ stressful thoughts. While considered as a cognitive approach, IBSR is considered as a more direct and focused therapeutic approach than Cognitive Behavioural Therapy, is delivered both as one on one therapy and as group therapy, and is also considered as a transferable skill which can add resilience to the individual ²⁰. IBSR restores and adds to the individual’s personal resilience in the context of challenges to their sense of health and well-being, to their sense of personal agency ²¹, and to their ability to more effectively cope and live well prospectively ^{16, 22}.

This study explores IBSR in addressing self-stigma as a means of improving primary care for people with severe spectrum obesity, utilising a multidisciplinary approach, in the community based general practice setting.

Historically, the approach of societies and health systems in relation to obesity has arguably been characterised by a focus on health care professionals and health systems, including bariatric surgery, policy evolution, public health measures, fiscal interventions at governmental level, pharmacotherapy, and societal responses towards healthier communities and addressing the obesogenic environment (e.g. Slaintecare, Healthy Ireland and Making Every Contact Count). In key respects, this approach inadvertently intensifies the effect of The Inverse Care Law ²³ (e.g. greater availability of Bariatric Surgery and SGLP1 Agonists to people who are relatively affluent), and has historically neglected and misunderstood the broader, deeper personal experiences of people living with obesity, reflected and experienced as stigma and self-stigma ²⁴⁻²⁶. This historical approach has maintained a focus on services, agencies, and perspectives which in key respects may engage more on the insights, concerns and capabilities of healthcare professionals rather than on the insights and personal experiences of people living with obesity.

Collectively, the capacity of bariatric care in Ireland remains seriously inadequate at present, and the treatment modalities available to individuals living with obesity are limited, chiefly to bariatric surgery, restricted pharmacotherapy, and a limited but growing range of evidence based primary and secondary care behavioural approaches ²⁷. Current interventions are focused to a greater or lesser extent in the healthcare domain. Further, access to these services is inadequate for many, due to cost, location and service capacity ²⁸, with the Inverse Care Law clearly evident in many health care systems, including in Ireland. Poor people, most at risk of severe obesity, are arguably least likely to have timely access to relevant services.

This proposal partly addresses the issues highlighted above, in conducting a general practice community-based pilot study, where a convenience sample of people with severe spectrum obesity are invited to participate and engage with a talking therapy intervention focused on addressing obesity stigma and particularly obesity self-stigma. The intervention was free at point of service for participants.

Methods

This was an observational mixed method pilot study, utilising the technique and practice of IBSR, including preliminary invitation, preliminary interview and evaluation. This was followed by a moderately intensive blend of predominantly group, some couples, and discretionary one on one sessions of IBSR, each delivered by 3 accredited facilitators in IBSR, over an 8-week period. This was in turn followed by an exit evaluation, with a final interview and evaluation. Pre and post evaluations were carried out by a Clinical psychologist (GW).

A convenience sample of people with severe spectrum obesity was obtained from a three-doctor general practice. GPs were advised to use clinical judgement, and guided by suggested criteria to consider people with BMI of >40, or >35 with significant co morbidities. Cases were actively identified and referred to GW for invitation to participate and recruitment. The sample was subjected to a series of curriculum directed IBSR guided conversations, provided in both group (7 sessions delivered synchronously), partner and individual one to one settings (1-2 sessions). Sessions were conducted online, utilising the inputs of 3 certified and accredited IBSR facilitators (including NFF), a clinical psychologist (GW), and participating GPs (including BOS). Participants were initially approached by their attending GP, and subsequently provided with a participant information sheet, invited to preliminary consultation by the Course Co Ordinator (GW) to address any questions or queries. Participants were then invited to complete a form of informed consent. Each IBSR session was followed by an individual de briefing phonecall (GW). Outcomes included pre- and post-intervention surveys BDI ²⁹, HRQoL Scale ³⁰, WBIS ³¹, WSSQ ³², measurement of weight and height, and qualitative data obtained from participants recorded as comments at post intervention interviews, all of which was delivered and completed over a 12-week period.

Participants completed a series of moderately intense sessions, guided by a customised curriculum, under the following headings, delivered largely on Saturday mornings (scheduled following consultation with the group) over a series of c.3 hour Zoom sessions. These included Introductory Session (IBSR technique), What others think of me because of my weight, How my weight limits me, Previous efforts around weight control, The story of my Weight, Me, my Body and my Weight, Shame and Guilt, Health, and Who I truly am.

Ethical approval for the study was obtained from the Faculty of Health Sciences Ethics Committee, Trinity College Dublin.

Results

It was relatively easy for participating GPs to identify a convenience sample of people in the practice with severe spectrum obesity. Of 22 initially identified and invited to participate by their GP, 14 commenced and 10 completed the intervention.

For the 10 completing, mean BMI was 42.8, mean age 49 years, and female:male ratio was 7:3. Given the small size of the sample invited, it is difficult to meaningfully describe characteristics of those who declined to complete or who dropped out, however individual reasons cited by these included not having the time to participate in all of the sessions ($n = 3$), believing the proposed intervention was not relevant to them ($n=2$), planning to undergo or having undergone bariatric surgery as a preferred approach for them ($n=2$), and others declining ($n=3$) based on their own concerns that the proposed intervention would be ‘too much,’ or ‘overwhelming’ for them.

Scale data and statistical analysis

Participant responses to negatively-coded scale items in the Weight Bias Internalised Scale, Weight Self-Stigma questionnaire, and Beck Depression Inventory were reversed before analysis. A sum score for each scale was computed for each participant at pre- and post-intervention. For the HRQoL scale, scores on sub-items such as Q1 “Would you say your general health is ... [Excellent, Very good, Good, Fair, Poor]”, or number of days when physical/mental health were not good, or days where participants were prevented from their daily activities due to poor physical/mental health were analysed individually. For Question 1, Likert-type responses were coded as 1 = Excellent, 2 = Very good, 3 = Good, 4= Fair, 5= poor. For questions 2 - 4, the number of healthy days was computed by subtracting the participant’s response (i.e. number of NOT healthy days) from 30. For questions 10 – 14, the participants’ raw responses in number of days was used. In cases where participants indicated an uncertain value, such as “2 or 3” days, the lower of the two numbers was used. The pre- and post-intervention scores for each scale or scale item were analysed for statistical differences using

the Wilcoxon Signed Rank Test (matched pairs) in IBM SPSS Statistics version 29.0.1.0 (171). Cases with missing values were excluded from the analysis (WBIS, WSSQ, BDI n= 3; HRQoL n= 4) – in these cases, participants did not complete the post intervention questionnaires, or had otherwise earlier withdrawn from the study for a variety of reasons (see Table 1). In practical terms, given numbers involved, it was challenging to make pre-post comparisons for the questionnaire instruments.

Table 1 Attrition

22 patients in the practice were invited by their GPs

- 3 Cited unable to make the time commitment
- 2 Felt intervention was not relevant to them
- 2 One had just had Bariatric Surgery, and another was closely considering bariatric surgery
- 1 'No Show'
- 1 'Too much to take on'- concurrently experiencing job insecurity
- 1 Major illness in a family member
- 1 Felt experience of initial session overwhelming (opted out early)
- 1 Experienced powerful / difficult recollection of previous trauma (opted out early)

12 commenced intervention

10 completed intervention (two later opt outs)

Mean BMI 42.8

Mean age 49yrs

f:m ration was 7:3

Very high levels of comorbidity generally noted within the group

Table 1: Weight Bias Internalisation Scale, Beck Depression Inventory, and Weight Self-Stigma Questionnaire

There was no significant difference post-intervention in participants' responses to the WBIS questionnaire ($Z = 1.683$, $p = 0.092$), or the Beck Depression Inventory ($Z = 1.888$, $p = 0.059$). However, a statistically significant difference was observed in the WSSQ, where participants' post-intervention scores were significantly lower than pre-intervention ($Z = 2.293$, $p = 0.022$) (Table 2).

Table 2: Analysis of participant responses to Weight Bias Internalization Scale, Beck Depression Inventory, and Weight Self-Stigma Questionnaire

Scale	Baseline median	Median difference (IQR)	Z	Effect size	Sig
WBIS	43	-7.500 (-18.750 – 2.000)	1.68 3	0.532	0.092
BDI	17.5	-6.000 (-10.75 – -2.25)	1.88 8	0.597	0.059
WSSQ	43	-14.500 (-18.750 – -7.000)	2.29 3	0.725	0.022*

Table 2: Analysis of participant responses to Weight Bias Internalization Scale (WBIS), Weight Self-Stigma Questionnaire (WSSQ), and Beck Depression Inventory (BDI). Indicating baseline (pre-intervention) median score, median difference between pre- and post-intervention with interquartile range (IQR), Z-score, effect size, and p-value (Sig); n= 10 for each scale.

Health-Related Quality of Life scale

No significant difference was found between any of the core healthy days or healthy days symptoms module responses pre- and post-intervention (Table 3).

Table 3: Analysis of participant responses to Health-Related Quality of Life Core Healthy Days module and Healthy Days Symptoms module

Scale item	Baseline median	Median difference (IQR)	Z	Effect size	Sig
Q1: General health (score)	3.000	0.000 (-2.000 – 0.000)	0.849	0.283	0.396
Q2: Physically healthy days	25.000	0.000 (0.000 – 5.000)	0.524	0.200	0.600
Q3: Mentally healthy days	24.000	3.000 (0.000 – 18.000)	1.193	0.175	0.233
Q4: Impairment-free days	30.000	0.000 (0.000 – 5.000)	0.921	0.398	0.357
Q10: Pain limited activities (days)	2.000	-1.000 (-14.000 – 1.000)	1.126	0.375	0.260
Q11: Felt sad, blue, or depressed (days)	8.000	-5.000 (-18.000 – 0.000)	1.778	0.593	0.075
Q12: Felt tense or anxious (days)	10.000	-6.000 (-20.000 – -2.000)	1.541	0.514	0.123
Q13: Had poor rest (days)	10.000	-10.000 (-10.000 – 0.000)	1.198	0.399	0.231
Q14: Felt very healthy and energetic (days)	4.000	0.000 (0.000 – 20.000)	1.363	0.454	0.173

Table 3: Analysis of participant responses to Health-Related Quality of Life Core Healthy Days module and Healthy Days Symptoms module. Indicating baseline (pre-intervention) median score, median difference between pre- and post-intervention with interquartile range (IQR), Z-score, effect size, and p-value (Sig) for scale items in the Core Healthy Days and Healthy Days Symptoms modules; n= 9 for all items.

Qualitative Data

Many participants believed obesity was their own fault, and they related a lifelong process of very difficult interactions with healthcare professionals. They valued this practice-based opportunity to engage with the intervention. While participants had frankly alarming levels of comorbidity, which was a cause of ongoing and intense concern among the GPs, participants themselves were far more concerned regarding stigma and self-stigma, particularly expressed as fears of being judged, and negatively judging themselves.

Finding the process challenging but also the group support to have been very helpful was reflected in comments from several participants. 'I found a lot of resistance was coming up, but I was able to power through it, and I'm feeling so thankful for all the support in the group.' It was also noted '... today I suddenly seemed to understand that my entire vision of myself is based on what I assume other people are thinking. So, now I am going to make a habit of being conscious of how I feel when I enter a room, go somewhere new, stand on my own at a meeting or a party. Instead of thinking everyone is staring and wondering why I'm fat/how dare I appear in public/I am not worth getting to know, I am going to tell myself they are probably thinking about what they're doing this weekend or how to pay the bills. I think physical strategies will help me - straighten up, walk with confidence, look at people, think about the surroundings instead of how I look. It will be a lifetime of learning ahead of me.' Most participants experienced the intervention in a strongly positive manner. Examples of responses at final interview included 'I speak more kindly to myself now,' 'This was the first time I felt heard,' and 'That I'm worthy even with my struggles.'

Measures taken to support participants experiencing challenge and distress in the course of the intervention included opportunities for peer support through groupwork, the facility to arrange separate 1 on 1 facilitation where considered helpful to do so, and availability of practice-based GP input as required. While a standardised approach was taken in relation to the final interview (see Table 4), due to small sample size, formal thematic analysis was not practical.

Table 4: Exit Interview

Participant ID:

Date:

Interviewer Name (GW):

Thank you for your participation in this study. We'd like to ask you a few brief questions about your experience. Your feedback will help us better understand how participants perceived the intervention and what, if any, changes they experienced.

Please feel free to speak openly and honestly. There are no right or wrong answers.

Interview Questions

1. Overall Experience

How would you describe your overall experience participating in this study?

2. Perceived Changes

Since the intervention, have you noticed any changes in how you think or feel about your weight or body?

Have you noticed any changes in how you respond to negative thoughts or self-criticism?

3. Experience with IBSR

What was your experience of the Inquiry-Based Stress Reduction (IBSR) process like?

Were there any particular exercises or sessions that stood out to you?

4. Emotional Impact

Did the intervention bring up any unexpected emotions or thoughts for you?

Did you feel emotionally supported throughout the process?

5. Stigma and Self-Perception

Did participating in this study affect how you perceive societal attitudes about weight?

Did it change how you relate to those attitudes on a personal level?

6. Feasibility and Acceptability

Was the time commitment and structure of the study manageable for you?

Would you recommend this kind of program to others who struggle with similar experiences?

7. Suggestions and Final Thoughts

Is there anything you think could be improved in how the study was conducted or delivered?

Is there anything else you'd like to share about your experience?

Thank you again for your time and openness. Your input is valuable and greatly appreciated.

Table 4: Exit Interview: Given small sample size, meaningful thematic analysis was not possible.

Management group and participant group observations

Throughout the study, the project management group and participating GPs were mindful of the sensitive nature of the study and risk of distress and harm to those invited, and eventual participants. In practical terms, this concern was reflected in a thoughtful and informed process of informed consent, provision of information regarding the study, and a robust process of follow up throughout, particularly after session individual debriefings by the Course Co Ordinator (GW), and the availability of the referring GPs to directly engage in instances of acute anxiety or emergent medical complications.

During final debriefing of the Project Management Team, the following observations were noted verbatim.

‘There’s a lot about, diet, exercise and weight out there for these people, but not a lot about how people feel and think about their weight....’ ‘They (participants) also clearly have a large number of other psychological issues that they are dealing with, many of which may have contributed to their becoming overweight.’ ‘This intervention was primarily related to and boundaried by weight, but of course The Work (IBSR) is not....many issues surfaced during both group and one to one sessions.’ ‘They (participants) are consumed by shame and issues relating to stigma, whereas we as Health Care Professionals are consumed and stressed by a cascade of issues relating to medical risk, medical management, our own workload, and inadequate time, so that there is a significant cognitive dissonance between people and HCPs....’

Among those completing the intervention, one participant was acutely admitted due to an acute weight related surgical condition, one other was admitted due to an unrelated acute medical episode, and one other experienced an acute unexpected bereavement. Two of the 10 availed of unscheduled medical care from their (attending GPs) during the course of the intervention, one of these to a very significant extent.

Several participants observed the intervention caused them to reflect powerfully on their distant past. Several were also surprised at better understanding some of their own beliefs regarding obesity. ‘What I really believed, but didn’t really know it, was that I had believed that no one who is obese deserves to be happy – that’s what I thought.’ Several also reported, that approaching the end of the intervention, they were readily finding a broader applicability of IBSR in other areas of their lives, including at their workplace, and within their engagement

with family and social networks. Several of those completing the intervention reported strong feelings of support within the group, and in the process of facilitation.

Discussion

A statistically significant reduction in Weight Self-Stigma at 12 weeks is a key finding of this study. The second key finding is that the study was feasible on minimal support, and based on rates of completion, acceptable in the general practice setting.

Strengths of this study include the use of an emerging therapeutic modality (IBSR), in the community setting, in relation to the important and challenging clinical condition of obesity. The use of General Practice as a setting is likely to have been of benefit in terms of recruitment, engagement and retention of participants, who in turn may have appreciated referral to the study on the personal recommendation of their own GP. Broadly, delivering this as a community based setting is closely aligned with Slaintecare ³³, the overarching policy framework governing future development within the Healthcare System of Ireland.

Some of the study involved face to face time, and locating the study in the individual's own General Practice is likely to have rendered participation more convenient in certain respects, and particularly for a group of people of whom many have restricted mobility. A good level of completion by the final group is evident, indicating good levels of acceptability. The statistically significant reduction in the Weight Self-Stigma Questionnaire on final evaluation was an important positive outcome of the study, particularly given the modest sample size.

Limitations of the study include small sample size, drawn from a single practice. Further, the cases referred by participating GPs reflected demographic homogeneity (preponderance of white women aged 40-60 yrs), which is a further limiting factor in relation to generalisability of results. While objective data from pre and post evaluations was complete, there was limited collection of a rich stream of qualitative data from both the participants and the project team, which primarily reflected very limited resources to conduct the study in the first instance. The study was unfunded and benefitted from administrative support and accommodation from the practice. Facilitator time was provided at cost and paid for by the Practice. A further limitation of the study is the relatively brief period of data collection and follow up (c 12 weeks). While anecdotally, several of the participants commented positively on aspects of their experience with IBSR in the following year to individual of the GPs (I've never been as bothered about what people think of my weight ever since...'), a longer and more in-depth study of impact is desirable. As part of this, value and outcomes could be compared between delivering the intervention online and in person, and a more robust process of recruitment, with a view to more systematic sampling of participants could be usefully adopted, as opposed to convenience sampling.

A statistically significant reduction in Weight Self-Stigma at 12 weeks is a key finding of this study. While the WBIS did not demonstrate a similar reduction, this may relate to the greater focus of the WSS on self-stigma. The second key finding is that in key respects the study was feasible on minimal support, and acceptable in the general practice setting.

Comfortably and effectively engaging professionally with people living with obesity has historically been challenging for both people attending for healthcare, as well as health care professionals. The cognitive dissonance between the pressing and acute concerns of both of these groups evident during this project is surely and highly relevant in this regard and should be borne in mind in the conduct of future studies, and in service delivery in this area of care.

Statistical analysis using the Wilcoxon Signed Rank Test indicated that there was no significant difference between pre- and post-intervention scores in the WBIS, however this contrasted with responses to the WSSQ where participant scores were significantly lower post-intervention. This difference may relate to the conceptual basis underlying the two scales' respective measurements, where the WSSQ places greater emphasis on aspects of guilt and shame relating to weight. Understanding of the latter is noted as a potential enabler for healthcare practitioners' competency in managing clinical encounters with people living with stigmatised health conditions ³⁴. This is especially relevant in obesity where understanding and acknowledgement of patient attitudes and feelings towards their condition may enhance quality of care ³⁵.

Whilst no significant difference was observed across the group for BDI scores post-intervention, only three of the ten participants' scores were in the normal range pre-intervention (i.e. no mood disturbance or depression), whereas post-intervention this figure was doubled. Furthermore, pre-intervention five participants were experiencing depression (one borderline, four moderate), whilst post-intervention there was only one participant in this category (moderate). The observed median difference of -6 points on the BDI scale post-intervention would be sufficient to move between the lower end categories (e.g. borderline clinical depression to mild mood disturbance, or mild mood disturbance to normal), suggesting that further investigation of the potential effects of the intervention might be useful. Further studies with larger sample sizes may help to clarify whether statistically significant changes in BDI scores can be created by the intervention, although pre-screening of participants may be needed to understand the prevalence of treatment-resistant depression, which might also affect the outcome ^{35, 36}.

The choice of general practice setting was clearly contributory to ease of recruitment, retention, and support for the study, and our results support further exploration of use of the general practice setting for embedding a strand of IBSR as a Primary Care Talking Therapy for people with severe spectrum obesity.

It is next intended by this study group to conduct a larger study in five general practices, in order to conclude a more powerful study, and ascertain the extent to which key findings in this pilot can be replicated with a larger participant sample, and involvement of additional practices and IBSR facilitators. In the conduct of an extended study, the approach taken with this pilot is relevant, but additional resourcing would be necessary for training needs of GPs and GP Nurses unfamiliar with the theory and practice of IBSR, and in improving consultation skills relevant for people living with obesity.

Declarations of Conflicts of Interest:

None declared.

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