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## Cross-Sectional Analysis of Attitudes Towards Bariatric Surgery Tourism of Patients Attending a Weight Management Program: A Qualitative Study



Paul Joonkoo Choi<sup>1,2\*</sup>, Ryan Terrence Pereira<sup>1</sup>, Áine Killeen<sup>3</sup>, Gerard Thomas Flaherty<sup>1,4</sup>

<sup>1</sup>School of Medicine, National University of Ireland, Galway, Ireland <sup>2</sup>Seattle Science Foundation, Seattle, USA <sup>3</sup>Croí, the West of Ireland Cardiac Foundation, Galway, Ireland <sup>4</sup>School of Medicine, International Medical University, Kuala Lumpur, Malaysia

**Corresponding Author:** Paul Joonkoo Choi, Seattle Science Foundation, 550 17th Ave, James Tower, Suite 600, Seattle, WA 98122, USA. Tel: +1-4702327994, Email: paulchoi92@gmail.com

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#### Abstract

**Introduction:** The upward trend of seeking bariatric surgery tourism will only grow with the globalization of medical care. We aim to describe the experiences participants of a supervised weight loss program in relation to their pursuit of bariatric tourism.

**Methods:** Semi-structured interviews with an unbiased questionnaire were conducted to obtain a profound understanding of the current Irish bariatric surgery recruitment program and bariatric patients' perception of it.

**Results:** Analysis of interview data yielded 5 themes. Each theme was elaborated further with selected quotes from the coding process. Participants were asked to suggest potential solutions to current bariatric surgery and tourism support concerns in Ireland. Authors' recommendations based on a literature review and the analysis of the interview transcripts are also provided.

**Conclusion:** Any patients with morbid obesity and many years of attempted weight loss should receive a bariatric procedure to alleviate not only weight-related metabolic co-morbidities, but also the associated psychiatric burden. The currently available eligibility criteria and the lack of resources render an ideal surgical intervention inaccessible to many. Efforts must be made to scrutinize the efficacy of the existing criteria and the availability of resources. Alternatively, a bariatric tourism scheme that allows uninterrupted patient care should be developed.

Keywords: Medical Tourism, Bariatric Surgery, Obesity, Weight Management

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## Introduction

The American Society of Metabolic and Bariatric Surgery (ASMBS) defines medical tourism as "traveling across international borders to access healthcare or physician services that are not available or less attractive in a person's native country".<sup>1</sup> In recent years, a significant number of United States and Canadian citizens have pursued this practice for bariatric surgery to circumvent an extensive waiting-list.<sup>2,3</sup> For instance, Canada only offers bariatric surgery to 1% of eligible patients with an average wait time of 5 years due to limited resources.<sup>4</sup> The upward trend of seeking medical tourism will only grow with the globalization of medical care.<sup>5</sup>

There have been reported cases of post-operative complications from suboptimal follow-up and interrupted transition of care.<sup>2,3,5,6</sup> Furthermore, questions have arisen

regarding the lack of evaluation protocols to assess the competence of foreign surgeons, whether an ensured continuity of care exists, and if foreign hospitals utilize devices or techniques that are unfamiliar to one's regional counterpart.<sup>3,7</sup> If any complications arise, the regional physicians would carry the burden of being responsible for a correctional intervention of an unfamiliar procedure.<sup>3</sup> For instance, Gangemi et al presented a case of a 43-year-old male who received bariatric surgery overseas and experienced an intestinal perforation, a rare complication, due to inadequate follow-up and continuity of care.<sup>3</sup> The patient's correctional surgery was delayed due to local surgeons' unfamiliarity with a foreign device used in the initial procedure.<sup>3</sup>

It has also been reported that managing the complication poses a significant financial burden on patients' local

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communities.<sup>2</sup> ASMBS discourages bariatric surgery tourism "unless appropriate follow-up and continuity of care are arranged and transfer of medical information is adequate".<sup>1</sup> There have not been studies assessing the Irish population's experience of bariatric tourism. We aim to assess patients' experiences in order to develop an appropriate recommendation to minimize possible downfalls and maximize potential benefits that bariatric tourism may offer.

The data obtained from this study will provide a novel insight into the experiences of bariatric tourists, the challenges they encountered during their pursuit of procedures, and the means by which these difficulties were overcome or could be addressed with optimal medical tourism preparation. This is a neglected aspect of travel medicine and obesity research in Ireland, so it is hoped that the findings of this study will raise its profile. We aim to describe the experiences of CLANN (Changing Lifestyle with Activity and Nutrition) participants in relation to their previous and current pursuit of bariatric tourism, to identify perceived barriers to overseas travel to receive procedures and the rationale for such restrictions, to elaborate solutions to such barriers, and to generate recommendations for potential bariatric tourist centers.<sup>8</sup>

## Methods

## Study Design

Semi-structured interviews were conducted, and data on the views of patients attending a weight management program was collected under a series of subheadings in order to obtain a profound understanding of the current Irish bariatric surgery recruitment program and bariatric patients' perceptions of the current scheme. The interview questionnaire was designed to be comprised of unbiased approaches.

## Population and Sample

Adult participants who were referred to the CLANN weight management program at the Croí Heart and Stroke Center were introduced to this study and invited to participate. All adult patients who had pursued bariatric tourism, were conversant in the English language, and had sufficient literacy to understand the study information leaflet and consent form were eligible. Those who have never considered bariatric surgery tourism were excluded. Obtained consent forms and interview transcripts were stored securely to ensure patient anonymity. The average age and body mass index (BMI) of the participants were 45.35 and 50.1, respectively.

## Study Setting

Participants were interviewed face-to-face for approximately 45 minutes in a quiet, private conference room with a desk in between the interviewer and the interviewee. The interview environment was comfortable, and the participants had access to water and tissue papers at all times.

## Recruitment

One male and 11 female adults from 162 participants (51 males and 111 females) across seven different CLANN groups were recruited over a period of 5 months. As with all qualitative studies, the goal was to obtain rich, comprehensive

data rather than a large number of samples. Twelve interview sessions led to data saturation.<sup>9</sup>

## Data Collection

The sessions were electronically recorded on a secure mobile device. The data was treated confidentially. The audio recordings were stored in a password-protected mobile application (Voice Recorder) in a password-protected folder on a password-protected I-phone 5S. Every measure was taken to ensure that questions were posed sensitively and that the principles of effective healthcare communication were used. Immediately following the interviews, the recordings were transcribed and stored as encrypted Microsoft Word files on a personal computer, which was linked to the National University of Ireland, Galway (NUIG) server. No data remained on the mobile device once the transcript had been approved. No data was stored on portable devices such as USB keys or transmitted via email. Study results were then analyzed thematically. The data analysis took take place at the School of Medicine, NUIG on a networked desktop computer.

#### Data Analysis

The attained data was analyzed using the interpretative phenomenological approach (IPA), a qualitative measure that offers a thorough scrutiny of lived-experiences in participants' own words.<sup>10</sup> IPA is helpful in handling vague and complicated topics that encompass participants' emotions.<sup>10</sup> Following the analysis, thematic categorization was conducted to capture recurring subject patterns in the transcripts, and crucial elements were selected to answer the study questions.

#### Results

The analyzed interview data yielded 5 themes, which are summarized in Table 1. Each of the themes is elaborated further below with selected quotes from the coding process.

#### Theme 1: Reasons to Consider Bariatric Surgery

Participants overwhelmingly emphasized a lack of self-control as one of the main reasons to consider undergoing bariatric surgery.

Two of the participants noted,

"I am one of these people who needs boundaries. The reason I thought a gastric band would work for me was because I could only eat what my stomach allowed me to eat. I wasn't eating with my head; I was eating with my tummy." (Participant #1)

"They knew I need the extra kick if they wanted me to live past 40 because I cannot do it by myself." (Participant #3)

Some participants emphasized bariatric surgery's potential role as a motivational tool to lose weight:

"I wanted to get just one of these surgeries done just to help me and use it as a tool to motivate me: 'you've done this now, you gotta do something to pay back for it." (Participant #3)

"If I was fit and active and liked my appearance, I would be more motivated to keep my appearance. At the moment I hate what I look like. So, I just don't get the motivation." (Participant #2)

Participants also highlighted the surgery's role as a last resort to lose weight. Gibbons et al documented that those

#### Table 1. Overview of Themes and Key Concepts

Themes	Key Concepts
Theme 1: Reasons to consider bariatric surgery	<ul> <li>Lack of self-control</li> <li>Motivational tool</li> <li>Last resort</li> <li>To improve personal quality of life</li> <li>For family life</li> <li>Perceived health risk associated with untreated morbid obesity</li> </ul>
Theme 2: Long nature of waiting for bariatric surgery and problems with the current wait-list system in Ireland, which may adversely affect:	<ul> <li>Patient mental health</li> <li>Patient motivation</li> <li>Patient physical health</li> <li>Patient fitness for bariatric surgery</li> <li>Obesity</li> </ul>
Theme 3: Availability of reliable information and support regarding bariatric surgery and bariatric tourism in Ireland	<ul><li>Transparency of information</li><li>Availability of social groups for bariatric patients</li></ul>
Theme 4: Perceived barriers to bariatric surgery tourism	<ul> <li>Availability of information about and support for tourism</li> <li>Transparency of information</li> <li>Unfitness of patient for surgery</li> <li>Mobility issues</li> <li>Financial issues</li> <li>Insurance issues</li> <li>Organizing the tourism: accommodations, recovery and complications, follow-up and aftercare</li> <li>Lack of social support</li> <li>Prejudices in Ireland about bariatric surgery/tourism</li> <li>Language barrier</li> </ul>
Theme 5: Suggested solutions	<ul> <li>Early referral by primary physician</li> <li>Improving availability of information</li> <li>Information in forms of leaflets, figures, and videos</li> <li>Need for an organized bariatric tourism program</li> <li>Need for psychiatric support</li> <li>Need to reduce stigma about bariatric surgery and tourism</li> <li>Improving government support</li> </ul>

who seek bariatric surgery tend to have a substantial history of failed weight loss attempts since adolescence.<sup>11</sup>

"I asked to see a dietitian in about 2000. So, I've been seeing a dietitian in my own GP [general practitioner] practice once every six months probably since then and with little, maybe some, success, but not a lot. I'd lose weight – maybe a couple of pounds – and then I'd put it on." (Participant #11)

"I've done everything and anything; I said it has come to a stand-still. There's not that much gone, no matter what I do." (Participant #11)

Participants addressed their need to improve their personal quality of life:

"When I walk into a store, I want to be able to grab a shirt and eyeball it and know it would fit me and just pay for it and walk out of the store without even putting it on. I have been dreaming of this for years." (Participant #3)

"I would be able to live longer and maybe have a better or healthier life, because the way it is killing me now." (Participant #6)

A number of participants emphasized their desire to maintain or improve their family life:

"When I went back to the clinic 2 months ago, I was told that my chance of conceiving would be a lot higher if I did have the surgery. All I ever wanted was to have a family." (Participant #4)

"You know, when you're so anxious to get back control of your

life and to try to be there for your children, and I want to be around my children so I wouldn't die at a young age because of the weight." (Participant #9)

Some of the participants appeared extremely anxious about their perceived imminent death in relation to complications of morbid obesity.

"Listen, if I don't have the surgery, I'm going to die. I need to know; if you are not going to pass me for surgery, I have to all get into palliative care or something to plan for my leaving, because I can't, with the medical conditions that I have, and they're just building. I was more fit to get the surgery 7 years ago. I was up and about, I was dancing on stage, I was in musicals, I was out and had a life. I was working, driving everywhere. I'm mostly bed bound now." (Participant #7)

## Theme 2: Long Wait for Bariatric Surgery and Problems With the Current Wait-list System in Ireland

It appears as though Ireland has an extensive waiting list for bariatric surgery, which is threatening the well-being of patients with morbid obesity in a number of ways. One of the recurring themes was the adverse effects the long wait has on patients' physical and psychologic fitness for bariatric surgery. The worsening of their physical and psychologic fitness for surgery appeared to be affecting their mental health. In fact, six of the 12 participants admitted that they were being treated for depression. "I have been on a waiting list for a Dublin hospital since I was 17. I am 26 now. I had no correspondence or updates on my waitlist status. I have been wanting this surgery since I was young, because I struggled through my life from various things like family, social, and school, et cetera." (Participant #3)

"I went down to see my doctor. He sent me to Galway – that was about 5 years ago. [I was] doing other things and couldn't cope; even now I can't. I can't walk – me knees, I had to get two knee replacements. I can't do much you know walking or anything. I feel ashamed. I think enough is enough." (Participant #10)

"She [general practitioner] told me that there was a long waiting list, but she said you waited this long, she said so. I started about 4, 5 years ago since I went to her, and then like I started going to Dr. \_\_\_\_\_ [endocrinologist] and he put me on the milk diet, which was 3 years ago and then this [heart attack] happened last year." (Participant #5)

Fettich et al reported that depression in patients with morbid obesity who seek bariatric surgery is highly associated with the frequency of life experiences in which they feel stigmatized.<sup>12</sup> This explains the detrimental effect that prolonged waiting has on patients' mental health.

"That two years and a half of waiting brought me into depression. Cancer did not depress me, but looking at my weight go up every single day, trying to make myself stop and saying 'why can't you resist with logical thinking?' and I beat myself over it." (Participant #1)

"You are always thinking in that blind corner, 'what can I do to get myself out of this? What can I take, where can I hang myself?" (Participant #6)

One participant criticized the current bariatric care system in Ireland and how the system has adversely affected her mental health:

"I don't think that they even prioritize. I think it's just you're just another person. You're just another name. Like they don't care about the background or this one has suffered more than this one. I don't think they even look into that. It's just a take it the least as it comes and that's it. You're not prioritized. And if you drop out. Well, that's one less that they have to worry about ... So psychologically. It does put a strain on their health, like I do genuinely feel that my depression has gotten worse." (Participant #9)

The perception of possibly being unfit for bariatric surgery and an exacerbation of mental health issues were affecting patients' motivation to lose weight.

"You need someone to help you through it. You have to just admit that you're scary overweight and you need this done. It's disheartening when there's really nothing happening when you admit to this, but then, as I said, 7 years later, you're still admitting to it. It's very hard to keep the momentum going." (Participant #7)

"I just want to have the surgery and spend the rest of my life and, you know, make something of my life, where now I just feel like giving up." (Participant #9)

Conventionally, bariatric patients must undergo a comprehensive pre-surgical evaluation, such as the CLANN program, and psychologic consultation and prove that they are capable of adhering to the post-operative recommendations.<sup>13</sup>

However, healthcare professionals must also keep in mind that many patients with obesity have associated depression, which makes it difficult for them to keep up with so many years of evaluations.<sup>14</sup> It is the healthcare provider's responsibility to appropriately follow-up with his/her patients and work in their best interest upon mutually agreeing to establish a physicianpatient relationship. Moreover, Pearl et al questioned whether such an exhaustive evaluation is required for all patients, since such a system does not exist for most other types of surgery.<sup>13</sup>

"Well, I wanted to get the banding, put the band in. I wanted to get it years and years ago, but sometime, he [doctor] cut me back, because sometimes I couldn't make it to the appointment. And he said like you have to be there, this, and that, and I got fed up and stopped going." (Participant #10)

It also appeared that the long wait was making patients vulnerable to physical injuries, which could lead to immobility and the subsequent worsening of their obesity.

"I hurt my back badly last year and I spent almost 6 weeks nearly not able to walk. I was in a terrible state, and over the course of the time I put on a stone in that time, in 6 weeks, because I wasn't moving." (Participant #8)

"It's the waiting, just waiting and not knowing how long I'm gonna have to wait and more and more is gonna be put on and, you know." (Participant #9)

## Theme 3: Availability of Reliable Information About Bariatric Surgery

One of the concerns proposed by many of the interviewees was the lack of reliable and comprehensive information about bariatric surgery and tourism. It appears as though such information in Ireland is either unavailable or not transparent to those who seek it. The participants also heavily emphasized the need for a bariatric surgery social group.

"I couldn't find any other means to find any information about bariatric surgery in Ireland." (Participant #3)

"I think it's very inaccessible here. I found it very difficult just to find out the names of different bariatric surgeons. The information just wasn't there ... I felt like I was hitting my head off the wall trying to find out information [about bariatric surgery]." (participant #2)

Others noted:

"He [endocrinologist] did say that it removes part of your stomach so that you only have to eat smaller amounts of food. That's all. I read a lot about the surgery, but that's something I take on for myself. I'm not getting it really from the medical end." (Participant #8)

"I looked it up online. My main concern was that if I have the surgery, it may ruin my chances of being able to conceive. So I went online to see if I wasn't going to make myself worse. And there's mixed information out there." (Participant #4)

The importance of information transparency was also stressed by the participants:

"I don't have any information. So, it's a lack of information you know. Perhaps it could be something like a computer system or something like that you could go into and you could say, you know, you have a PIN, then a password that you say that and you're like oh your CLANN program is ticked off. So, you see that you're getting somewhere. But as it is now, I'm kind of like floating around. Where am I? Am I on the list? Does my appointment with Mr. \_\_\_\_\_ [bariatric surgeon] mean that I'm going further? Does it mean anything?" (Participant #8)

"I went in all happy and delighted to get to meet the surgeon and delighted that I was finally getting the surgery done. But then when I met him it was a totally different meeting. It was explained to me what I have to go through yet. And I am still not on the list. So, it did set me back an awful lot." (Participant #9)

"I have no clue [where I'm at in the waiting list]. I haven't talked to the surgeon, I have talked to Dr. \_\_\_\_\_ [endocrinologist] about it. I talked to him in August [2017]. He said it should be no problem getting it done. But I have no word. I don't know what's going on." (Participant #10)

A number of participants showed interest in being involved in a social group to hear from others who are also considering or have already received bariatric surgery.

"I would love to speak to more people that actually were considering it [bariatric surgery] and then I would love to speak to some people that have gone through it." (Participant #5)

"It's good talking to other people to hear what their experiences are. It's just that other people say that if they had the chance when they were my age I would have went for it [bariatric surgery], because they see the effects that it had over their lifetime." (Participant #12)

Theme 4: Perceived Barriers to Pursuing Bariatric Tourism Availability of Information about and Support for Tourism Many noted that there was a serious lack of information regarding bariatric tourism and that a significant portion of the available information was unreliable.

"Reading online blogs, I saw many people go to Poland to have it done. Online search was the only thing that I could use to search this area." (Participant #2)

"I mean, they tell me if there's a place I think that does surgery in England and Wales and has an office in Dublin, they say you get great aftercare. I don't know. I actually didn't know whether that was true or not." (Participant #11)

"What if it [bariatric tourism] goes wrong? Who do I turn to? Who do I be covered by a health here or medical card or would my GP know enough about it? So, that's my journey through to find out that it's something I know of, I'm aware of. " (Participant #11).

#### Transparency of Information

"Somebody somewhere knows something. I'll pick up the Internet and find out. And in this day and age, you know, I mean I wouldn't trust, you know, the reviews that you get on the Internet all the time, but I wouldn't trust, you know." (Participant #11)

"Who has the knowledge on the aftercare? Does my GP know that I have to have a certain diet over a certain number of tablets with a certain amount of painkiller or a certain amount of fluids or I can't take this and I can't take that?" (Participant #11)

Patients Are Unfit to Undergo a Surgical Procedure "When I had before it was... before I had a heart attack, before I had a pacemaker. If it had got to the stage or I thought 'yes you need to do this,' the options for me would have been that I would have had to go somewhere for it." (Participant #11)

#### Issues With Fitness to Travel

Mozo et al stated that limited space in an airplane seat poses extreme discomfort to travelers with morbid obesity.<sup>15</sup> Patients are also more prone to developing deep vein thrombosis and obesity hypoventilation syndrome during a flight.<sup>15</sup> Moreover, travel medicine clinics often do not document obesity as a medical condition.<sup>15</sup>

"I'd be gone in the morning if I was mobile, if it wouldn't be such a cumbrance, where I couldn't see me being able to get out to a plane. I can't drive anymore, so I'm relying on someone else to bring me." (Participant #7)

#### Financial Issue

Patients with morbid obesity are already under a significant healthcare financial burden. One Australian study reported that patients spend the most at general practitioners' offices, psychiatric clinics, and for sleep apnea management.<sup>16</sup> If extreme obesity is left untreated for a prolonged period of time, more co-morbidities can develop, further exacerbating these patients' already weighty financial responsibility.

"I've one friend who had her operation over in England. I think she had the sleeve done, but she went private over to England. I just said to her [general practitioner] like, I wish I had the money to do that." (Participant #5)

"If I had the money, I would definitely go, because it's just waiting, waiting, waiting the whole time." (Participant #9)

#### Insurance Issue

It appears as though bariatric surgery is not covered by Irish Medical Cards. Similarly, in the United States, Medicaid does not cover bariatric surgery as much as it covers traditional weight loss services.<sup>17</sup> This intercontinental phenomenon potentially prevents patients from receiving a timely intervention, i.e. when they are fittest for a surgical procedure. Moreover, younger patients are at a higher risk of developing psychiatric illnesses such as binge eating disorders and are more vulnerable to social stigmatization.<sup>18,19</sup>

"I don't even know if my Vhi [insurance] would cover me for going for this kind of surgery. My insurance company, because some of them don't. It's a very... it's an unknown quantity to me. I think, I think transparency is in the way like, you know." (Participant #8).

"My sister was overweight and she had talked about it, and she was in a fairly good job and had good healthcare. [She] moved to England and had good healthcare and moved back [to Ireland] and lost her healthcare." (Participant #11).

## Organizing Tourism: Accommodations, Recovery and Complications, Follow-up and Aftercare

It is crucial that bariatric tourists receive continued support during and after organizing a trip in order to establish an uninterrupted transition of care. Pereira et al concluded that the lack of information on medical tourism jeopardizes a patient's capacity to make an informed decision.<sup>20</sup> The lack of information regarding the need for a pre-travel consultation, the risks, benefits, and cost of the procedure, and a structured follow-up system to ensure continuous care exposes surgical tourists to the risk of experiencing a relatively poor prognosis.<sup>20</sup>

"I would have nowhere to stay, I would have... no... nowhere to stay over there. I don't know anybody over there. Do you know what I mean? Ehm, it would be hard for me to do it." (Participant #6).

"You have to find, get all the information you can, plan down, and make people aware of what your plans are, how your plans are, how much time you'll take off work, how much time you will be away, who is looking after the cash, who is going to look after you, how you are going to get to the airport, how you are gonna get back, will your GP be aware, will he take care of you. All that is organization. All that is something that you can do to take your mind off of what's coming ahead. What sort of preplanning for surgery do you need? I take aspirin; do I need to go off the aspirin for a week beforehand? Some people say it and some people don't. Is there any other tablet that I take that I need to come off? Is the insulin I take available in the country that I'm going to? If I'm away for two weeks, how many bottles of insulin do I take? Do I have to bring my own tablets with me?" (Participant #11)

"That would – like overseas, that would be, like, hard to deal with, but I would be scared of it actually. I spoke to Dr. [bariatric surgeon]. He told me that I'd be in the hospital for at least two to three weeks after surgery, and it would take a very long time to recover, because it's such a big operation. It would be very big challenge if this happened overseas." (Participant #5)

"I know one girl that got it done in France. Now unfortunately for her she had complications and ended up in intensive care and everything else. And I saw the burden that put on her family with her very very sick in another country." (Participant #11)

Apovian et al stressed that peri-operative care and postoperative follow-ups were crucial parts of bariatric surgery in ensuring patient well-being.<sup>21</sup>

"And the fear of if I got an ache or pain, there would be nobody here [in Ireland] who would help me. The fear of backlash. I thought the doctors here would say, 'Look, you got it from abroad, go abroad to get it fixed."" (Participant #1)

"You wouldn't be seeing that person [foreign bariatric surgeon] anymore; whereas if you have it done in Ireland here you'd be coming back to your doctor, and you'd be seeing him regularly." (Participant #6)

## Lack of Social Support

A number of participants expressed their concern about a potential lack of family support if they were to receive surgery overseas.

"Because if you had nobody over there to help ye, it would be very long and lonely over there on your own." (Participant #5)

"I have a daughter who's almost 20 and my mom. They'd be very like... they're very close to me and hugely supportive. And like, I don't think I could go through it without them, you know what I mean?" (Participant #8)

Prejudices in Ireland about Bariatric Surgery and Tourism Although obesity is known as a complicated neuropsychiatric disorder,<sup>15</sup> many obesity-related prejudices still exist. Stigmatization is associated with poorer obesity-related quality of life and has a greater association with psychiatric comorbidities.<sup>22</sup>

"I got asked why I'm getting this surgery from my gym trainers and my family. The only one who was supportive was my auntie who has worked through the health system and worked in America previously. Everyone else asked me why I couldn't be just normal by not eating crap." (Participant #3)

"I am not going to be saying off the rooftop that I got this surgery. It shows that I have been defeated in one way, that I couldn't do it myself." (Participant #4)

"Other people's response is why couldn't you do it without it? They don't realize the struggle. There is always going to be somebody. And I would probably be the same. Well, why didn't you try dieting? Why didn't you try exercise? Why didn't you try climbing to the top of Mount Everest and jumping off? You know, nobody says to you 'God it must have been tough to make the decision to do it and fair play to you." (Participant #11)

## Potential Language Barrier

"The language barrier was another thing that concerned me. Because I have an anesthetic allergy, I'm allergic to suxamethonium and metocurium, which were discovered when I had my tonsils out. I didn't wake up for a few hours after the surgery and I was in ICU (intensive care unit). Lack of communication may be a problem. I don't want to discover any more allergies especially overseas." (Participant #2)

## Theme 5: Suggested Solutions

Participants were asked to suggest potential solutions addressing the current bariatric surgery and tourism support concerns in Ireland.

#### Early Referral by Primary Physician

It is documented that early primary prevention, which involves family engagement and cognitive therapy, is crucial in promoting healthy weight.<sup>23-26</sup> According to Ferrante et al, weight loss service is not acceptably implemented at the level of primary care in the United States despite the country's obesity epidemic.<sup>27</sup> The authors stressed the need to educate primary healthcare professionals in the areas of obesity management and bariatric surgery.<sup>27</sup>

"Maybe refer people on sooner rather than let it go. You know my childhood GP would just tell me to lose weight. But there was never anything constructive in it. You know, just you should go lose weight, you're overweight, you know, he's like, whereas there's another GP in the practice now that had been overweight and he would've maybe talked more realistically about it ... I don't think that enough was done from the grassroots level and back to the GP level." (Participant #12)

#### Improving Availability of Information

"I suppose more information maybe. Something with all of the steps that need to be taken to get there, you know. Because I had wondered before, well ... was there a certain amount of weight I need to lose to get the surgery, or if I lose too much, would they say now you are fine now, so you don't need the surgery. Or you know, is it better to be fitter for surgery or if I was under a certain weight for the anesthetics. So, again it comes back to maybe information that I could go away and read." (Participant #12)

## Information Leaflet

There have been numerous reports about the effects of paper leaflets and visual cues in improving the health literacy of patients.<sup>28-31</sup> A number of participants expressed their interest in an information leaflet on bariatric tourism, from which they can acquire storable knowledge essential for making their decision.

"I think possibly there could be a little bit more information, something like a leaflet that you can pick up in a hospital or pick up in the GP surgery." (Participant #11)

"I suppose there can always be more, like, facts and figures in detail, and I suppose a lot of things were variable. So, you go away and only what you remember from any of the conversations. Whereas if there were either more leaflets or a handout or at least you go back and say this is exactly what it is and this is how much it is, you know?" (Participant #12)

## Need for an Organized Bariatric Tourism Program

"If I thought I could go, manage the travel and not get sick, not have the inconvenience of it, there's no problem with it." (Participant #7)

## Need for Continuous Psychiatric Support

"It's okay to give you a tablet, but then they need to get chained to the service, to change your way of thinking, change your way around, no feeling down and out." (Participant #6)

# Need to Reduce Stigma About Bariatric Surgery and Tourism

Perceived obesity-related discrimination may impose greater physical symptoms and worsen mental health.<sup>32</sup> It has been reported that the general population deems those who undergo bariatric surgery to be more lazy, incompetent, and irresponsible than those who lose weight with exercise and diet alone.<sup>33</sup>

"The attitudes have to change, but there will always be... I think there will always be a prejudice if that's the right word for obesity." (Participant #11)

## Improving Government Support

Participants emphasized the need to amend and address the existing bariatric system in Ireland at the government level.

"Like, they have a waiting list here in Ireland, and if you are too long, say, for getting a hip operation or something, they do send people over to England to get the operation and all that. It's a certain scheme that they do, they're not doing it with the obesity." (Participant #7)

"You know the government scheme where if you've been waiting for so many years you can have the surgery done in a foreign country or in the North or wherever ... I think the government would have to sit up and take notice and increase the funding available to weight loss clinics. I mean there is a weight loss clinic in Galway, and I think there is one in Dublin for the whole of Ireland which is experiencing an obesity problem?" (Participant #11)

## Discussion

Obesity is a common medical condition in the Irish population.<sup>15,34,35</sup> A number of patients with obesity seek bariatric tourism to circumvent a long wait time.<sup>20</sup> Although medical tourism may seem attractive, foreign studies have reported that it is not without significant downfalls.<sup>20</sup>

It is reported that bariatric surgery resolves both physical and mental illnesses.<sup>36</sup> In fact, a patient with the most severe mental illness can benefit from bariatric surgery in a fashion similar to that a non-psychiatric patient would.<sup>15</sup> Thus, healthcare professionals must recommend bariatric surgery to those who have an associated mental illness.<sup>14</sup> Although the surgery's safety and efficacy have been extensively demonstrated by the literature, many patients receive suboptimal bariatric care due to a lack of resources and the absence of a robust system.<sup>37</sup>

It appears as though Ireland is experiencing a shortage in bariatric resources. As a country with a growing population with obesity,<sup>34</sup> the waiting list appears to have exponentially grown in size in recent years. Eligible patients have been waiting for several years and have not been followed up appropriately. Many appeared anxious and frustrated that they were not provided with solid information on their place in the waiting list, what patient parameters were used to formulate the list, and what the surgery and tourism entailed.

In addition, patients were being waitlisted for many years only to be enrolled in the CLANN program, the only supervised, structured lifestyle modification program available in Ireland. All (n = 12) of the participants admitted that they have been offered an "8-week milk diet" (participant #4) of an unknown efficacy, and a significant number of them (n=5) reported having had an adverse effect from this intervention. For instance, one patient experienced a lifethreatening "major blockage and part of [the] bowel had to be cut away" (participant #7). The participants are also required to receive a psychologist's report prior to being approved for the surgery, which demanded further years of waiting, because "they're only dealing with 2016 yet," (participant #9). Moreover, participants were not made aware of the purpose of the report, i.e. to evaluate whether the patient is at risk of developing psychologic problems postoperatively from a subsequent rapid weight loss.<sup>13</sup> The additional years of waiting for acquisition of the required report were paradoxically deteriorating patients' mental health.

The years-long wait can by circumvented if patients can afford the cost of going "private" for the surgery itself and the psychologist's report. Many appear to have developed or experienced the worsening of physical and psychiatric conditions during the waiting period, which negatively affected their motivation to lose weight.

Participants also expressed their high expectations in bariatric care and disclosed their desire to work with "a reputable person and in a proper hospital, where [they] would be monitored, assessed" (participant #1). They also emphasized their reason to choose Ireland for bariatric surgery as due to the financial burden (n=12), lack of social support (n=5), and uninterrupted aftercare (n=5).

Ireland may need to increase funding for bariatric procedures to secure the availability of competent professionals and equipment for patient safety.<sup>38</sup> Alternatively, the development and execution of a well-designed surgical tourism scheme and being mindful of the Canadian crisis would be an option. Canadian bariatric tourists received poor post-operative aftercare service and the consequent complications that arose posed a tremendous public healthcare burden.<sup>5,6,8,39</sup> This recently became a national hot-topic and led to the termination of many private medical tourism companies in the country.<sup>40</sup> As more people seek bariatric surgery in the future and become wait-listed, Ireland could face a similar healthcare catastrophe.

The current European eligibility criteria for bariatric surgery requires patients to have a BMI of greater than the 99th percentile for age or greater than 40 kg/m<sup>2</sup> or 35-40 kg/m<sup>2</sup> with obesity-related comorbidities.<sup>41,42</sup> This system acknowledges only a cross-sectional understanding of the patients' obesity. In fact, studies have reported that this allows fewer adolescents to be suitable for surgery.<sup>41</sup> Gibbons et al suggested that those who pursue bariatric surgery tend to have a history of many years of failed weight loss attempts, and insurance companies should not pose as much emphasis on further futile conservative measures to delay bariatric intervention, but rather on patients' weight loss histories.<sup>11</sup> Box 1 reviews authors' recommendations based on a

**Box 1.** Recommendations for Improving Bariatric Care in Ireland 1. Early primary and secondary prevention

- 2. Improving availability and transparency of reliable information about:
- Types, risks, benefits, and costs of bariatric procedures
- Bariatric surgery in Ireland and its insurance coverage
- Patients' position on the waiting-list and patient parameters used to formulate it
- Surgical tourism and its insurance coverage
- Post-operative follow-up
- Pre-travel or pre-surgical evaluations

• Whether or not pre-travel/pre-surgical evaluations are indeed required for all patients

Bariatric social groups

3. Availability of information leaflets, educational videos, and websites to improve patient health literacy

4. Development of well-integrated multidisciplinary care by a primary doctor, an endocrinologist, weight loss program coordinators and nurses, a psychiatrist, a bariatric surgeon, and other healthcare professionals to address not only obesity but also associated comorbidities

5. Establishment of a well-organized government scheme to allow for bariatric tourism, which ensures a continual post-operative follow-up

6. Organization of social groups for bariatric patients

7. Community education to promote awareness of obesity-related stigma and prejudice

8. Increase in research funding for obesity to formulate more comprehensive eligibility criteria for bariatric surgery and improve quality and quantity of resources and facilities involved

Authors' recommendations based on literature review and the analysis of the interview transcripts.

literature review and the analysis of the interview transcripts.

#### Conclusion

Bariatric surgery is a safe and effective intervention that patients with morbid obesity who have attempted weight loss for many years should receive not only to alleviate weightrelated metabolic co-morbidities, but also to mitigate the associated psychiatric burden. The main perceived barriers to seeking bariatric surgery are the currently available eligibility criteria, which are ineffective, and the lack of resources that render an ideal intervention inaccessible to many. The authors recommend that efforts be placed to increase funding for studies to scrutinize the efficacy of the existing criteria and to improve the quality of resources. An alternative solution would be to develop a bariatric tourism scheme that allows uninterrupted patient-centered bariatric care.

#### **Study Limitations**

None of the participants participated in bariatric tourism; hence, the authors were unable to fully appreciate how bariatric tourism is carried out and how the patients are followed-up postoperatively in Ireland.

## **Authors' Contributions**

GTF conceived and designed the study with input from PJC. PJC conducted the semi-structured interviews under the supervision of GTF. Both PJC and RTP coded the interview transcripts. AK facilitated access to the patients interviewed in this study. All authors interpreted the coded interview transcripts and agreed on the thematic analysis. The first draft of the manuscript was prepared by PJC and subsequently edited by GTF. All authors read and approved the final version of the manuscript.

#### **Conflicts of Interest Disclosures**

The authors declare no conflicts of interest.

## **Research Highlights**

#### What Is Already Known?

- Bariatric surgery is a safe and effective intervention that patients with morbid obesity who have attempted weight loss for many years should receive.
- Currently available eligibility criteria and the lack of resources render an ideal surgical intervention inaccessible to many.
- The challenges encountered by patients in the pursuit of an ideal bariatric tourism experience is a neglected aspect of travel medicine.

#### What This Study Adds?

- Efforts must be placed to increase funding for further studies to examine the efficacy of the existing criteria and improve the quality of resources.
- Alternatively, a bariatric tourism scheme that allows for uninterrupted patient care should be developed.

## **Ethical Approval**

This study obtained ethical approval from the Clinical Ethics Committee of Galway University Hospitals with Code: C.A. 1894. Consent forms were obtained from all participants in this research.

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