

Assessment of telematic adherence to a nutritional education group for patients with obesity

Josefina Salom Catalán, Gabriela N Nicola Orejas, Yolanda Ibañez Borau.

Servicio de Endocrinología y Nutrición. Hospital Universitario Son Espases. Palma de Mallorca.

E-mail:

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Abstract:

The health crisis caused by the new coronavirus "COVID-19", abruptly caused many changes in the way of living, working or relating. Creating a nutritional education group programme, via telematics, was a response to adapt to the changes in order to continue offering a care service for patients with morbid obesity who were on the waiting list for bariatric surgery. The design of the programme had a multidisciplinary approach with nutrition as the main topic and two other fundamental pillars of the treatment, such as physical exercise and psychological aspects.

After 15 weekly sessions, the participants replied a satisfaction questionnaire to evaluate the project.

Keywords:

- Intervention design
- Telemedicine
- Nutritional programme
- Group
- Obesity
- Adherence

Introduction

Obesity is a chronic and multifactorial disease, which makes its approach complex. Currently, despite the knowledge of its high prevalence its approach from the area of public health is not prioritized. Some decades ago, it was known that among the possible predisposing factors were sex, age, genetics, sedentary lifestyle, eating behavior, certain drugs, endocrine diseases and dysfunction of the hypothalamic-pituitary axis. Nowadays, other possible factors have been incorporated, such as: epigenetics, chronodisruption, the intestinal microbiota, fetal programming, psychiatric problems, coping with stress, the endocrine disruptors to which we are exposed to, the alimentary profile, socioeconomic level and an obesogenic environment in our society (1). In Spain, in 2016, according to an analysis of 47 articles (300,000 individuals), there were 24 million people with overweight and if this trend does not change, it could reach 27.2 million cases in the year 2030 (2).

In recent years, bariatric surgery has been recognized as an effective therapeutic option for patients with morbid obesity (BMI ≥ 40 Kg/m² or with BMI 35-40 Kg/m² + severe associated comorbidities (3). Despite the optimal results shown and that it is an effective cost-effective treatment, patients who meet the requirements to undergo surgery are currently suffering the effect of the pandemic that has caused a collapse of the system and long waiting lists for the intervention.

During the wait, the multiple comorbidities continue to worsen (cardiovascular events, diabetes mellitus, cancer, sleep apnea-hypopnea syndrome (SAHS), osteoarticular problems (1) and their deterioration until surgery is even greater. Since the pandemic caused by Covid-19 did not allow to continue with face-to-face groups as they were developed in the pre-pandemic era, a group and digital nutritional education programme aimed at patients on the waiting list for bariatric surgery was designed.

Material and Methods

The recruitment of patients was carried out in person from the nutrition consultation of the Endocrinology and Nutrition service of Son Espases University Hospital.

The inclusion criteria were patients aged under 60 years old who had basic notions of computers, social network and new technologies. During their visit to the nutrition clinic, patients were recruited for the programme, explained the work modality and were convened a first meeting in the assembly hall where anthropometric and personal data were collected. The diet was prescribed and the schedule that would be followed during the entire period was clearly explained to them.

To develop the programme, Microsoft Teams computer application was used. At the end of the intervention programme, a satisfaction survey was carried out where the degree of satisfaction was analyzed through questionnaires of 24 questions specifically prepared, which assessed the use of ICT (Information and communication technologies) as a potential help to follow the nutrition education programme and finish it successfully.

Results

Including 37 patients, 22 of them completed the programme. The results were as it follows: To assess adherence to the programme, the scale ranged between 1 and 5, with 1 being very little and 5 being very much, the average score was 4.35, which showed that the telematic route had an impact between quite a lot and much to improve their adherence to follow the prescribed diet. The ratings were also between 4 and 5 to estimate very positively that through ICT it was easier to work in a group and that it also fostered new ties between the members of the group.

55% replied that it was better to follow the programme in group rather than individually. Regarding the assessment of nutritional education the score was 4.65 to answer that ICT provided a greater amount of information. In reference to the degree of satisfaction of the telematic group programme, the overall rating was 4.6, 70% of them rated the overall programme as very good (shown in Figure 1).

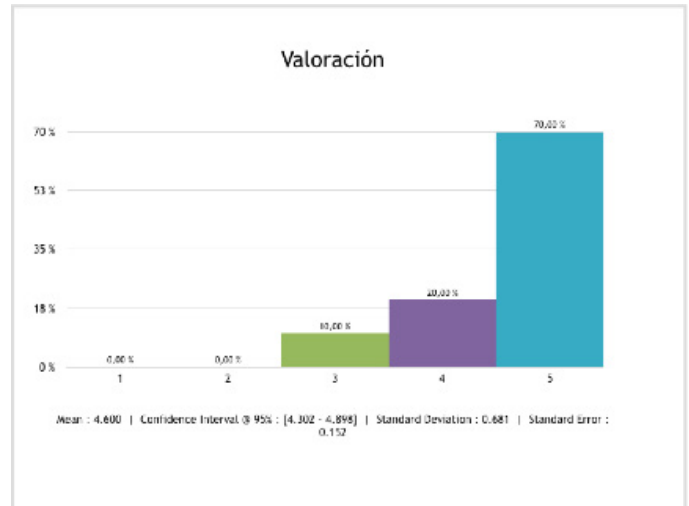


Figure 1. Overall classification of the programme. Source: self-prepared form using the QuestionPro platform

The evaluation of the content of the programme was for 85% between quite and very motivating, having learned new aspects about nutrition that they did not know and that they considered to be of real value. When asked if they would recommend this programme in a digital version, 81% of them replied that they would not only recommend it, but also that they would actively encourage it and as for whether in the future they would choose a digital format over a face-to-face one. The average number of responses obtained was 4 that meant "possibly yes", although it should be borne in mind that in this occasion the replies were more varied and were equally distributed between points 3 (under certain circumstances), 4 (possibly yes) and 5 (certainly yes).

Discussion

Although in the recent past, the participants had not valued following a programme online, participating in it was an extra motivation and a challenge in the face of a new and hitherto unknown format, which helped them improve adherence to the programme.

For patients, support within the group is highly important, they see, as a reference, other members who experience similar or the same situations, who face them and manage to combat them successfully. The group becomes stronger and takes its own voice, sharing their doubts, problems or achievements that can help others, all of which results in avoiding the frustration that is generated when working individually (8). Access to information during the sessions was immediate, from the same platform you could access the internet to search for any questions about a product's labeling, how to cook a not very common food or any other

type of information that generated any doubt, and share the information on the screen. The use of new technologies for the treatment of chronic pathologies can be a very useful tool to increase the commitment and compliance of patients (9). The health crisis has driven this project, a need was detected and it became a reality, which has been very positively valued in this time of pandemic.

Regardless of whether they choose to follow a similar programme in the future, digital, face-to-face or hybrid, there is scientific evidence regarding the benefit of repeated participation in obesity treatment programmes as it helps maintain weight loss over time and strengthen the strategies learned for it (10).

Conclusions

Based on the results of the satisfaction questionnaire, following a weekly virtual group nutrition programme with a multidisciplinary approach results in increased adherence to following the prescribed nutritional treatment. The digital environment facilitated group work, providing a broad horizon for accessing content and information that has served to learn new aspects of nutrition and incorporate them into everyday life, creating new attitudes and changing unhealthy habits. An environment of support and closeness has been generated and has led to the creation of close ties between the participants and improved adherence to the programme, as well as sharing common personal experiences that had an impact on the common good of the group.

Parallel to the development of the programme, certain perceptions regarding working online have been changing, in part due to the fact that it has been verified, the ease of use of the application, that following a distance modality can be just as motivating as following it from home. Furthermore, it has been verified that the access to the organizing team is more immediate and the comfort of not having to go to the hospital weekly.

Everything described is included in a very positive global evaluation that implies the recommendation to third parties to follow a programme of this style in digital format and that in case of repeating, the same type of project would possibly be chosen. It seems important to us to remember that our project had an initial session and a face-to-face final session that confers a hybrid model to the programme and that is part of its success.

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