Original Article



Psychological therapy in overweight and obesity treatment centers. Do the centers include it on their websites?

Andrea Arroyo-Fernández¹, María Ascensión Blanco-Fernández², Gina Lladó-Jordan^{3*}

¹Department of Health Sciences, Isabel I University, Burgos, Spain. ²Department of Psychology, European University of Madrid, Madrid, Spain. ³Department of Research, Valdecilla Biomedical Research Institute, Santander, Spain.

Correspondence: Gina Lladó-Jordan, Department of Research, Valdecilla Biomedical Research Institute, Santander, Spain. ginalladojordan@gmail.com
ABSTRACT

Obesity presents a steady rise in prevalence, highlighting the need to act with responsibility and social awareness. The internet has transformed the user's role, actively managing their health and emphasizing the importance of accessing quality content. The main objective of this study was to find out, specifically, how many of the resources studied included psychological intervention as one of the treatments that should be part of the multidisciplinary approach to obesity. Resources obtained through Google Chrome® were analyzed because it is our society's most-used search engine. This study shows that most centers that appear in the top positions of Google do not include psychology in their treatments. It is vital to have psychology within the multifactorial approach of obesity to guarantee the success of therapy and long-term weight maintenance. Finally, this article aims to highlight the importance of ceasing to address obesity from a purely physical perspective, emphasizing the incorporation of psychological support in its approach and prevention.

Keywords: Obesity, Psychology, Internet use, Emotional regulation, Healthy lifestyle

Introduction

Obesity is a serious health problem worldwide. It affects many countries and is a constantly growing pandemic. All this highlights the need to act responsibly to fight this epidemic. However, how patients seek help is often not considered [1, 2]. It is also important to highlight that the mechanisms that sustain and maintain obesity and overweight are not socially known. This disease is usually observed from a physical and stigmatized perspective. It is considered that people with overweight or obese do not take care of themselves, without going further and without taking into account the psychological sphere and the integral affectation [3, 4].

Access this article online	
Website: www.japer.in	E-ISSN: 2249-3379

How to cite this article: Arroyo-Fernández A, Ascensión Blanco-Fernández M, Lladó-Jordan G. Psychological therapy in overweight and obesity treatment centers. do the centers include it on their websites?. J Adv Pharm Educ Res. 2023;13(1):158-61. https://doi.org/10.51847/TCqButfuej

Traditionally, the management of obesity has been based on lifestyle changes. However, considering that obesity is defined as an accumulation of body fat whose origin is multicausal and multifactorial, it is essential to highlight that, in this condition, there are significant comorbidities and alterations. Among these alterations, we find physical comorbidities and physiological alterations [5].

Due to the aforementioned, obesity should not be considered a simple matter of weight. Therapeutic efforts should not focus only on weight loss since this will be determined by many interrelated factors that all play a role in the management and therapeutic success [5].

Obesity is also linked to the psychological sphere, which is highly influenced by societal experiences. The literature shows a wide range of related psychological aspects, such as body dissatisfaction, low self-esteem, and increased risk of psychopathologies such as depressive disorders and mental disorders, anxiety, eating disorders, emotional eating, or food addiction [6].

Therefore, it seems impossible not to include psychology in the approach to this condition. In cases where the approach does not include this discipline, the intervention may not be successful. On the other hand, the impossibility of reaching the objectives or

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms. maintaining progress can empower patients who want to look for alternatives to achieve their goals, and, on many occasions, this proactive attitude leads them to use the internet as a tool for consultation and search for therapeutic alternatives [6, 7].

Currently, it is prevalent to work with information and communication technologies. The internet is a technological tool with exponential growth that has caused essential changes in acquiring knowledge in the scientific field [4]. Although it is a handy tool, it is widely used by patients. In this way, patients use this tool to select the medical centers where they want to be treated without knowing if they will find a multidisciplinary treatment of obesity in these centers [7].

Due to what is mentioned in the introduction, the main objective of this study was to find out, specifically, how many of the resources studied included psychological intervention as one of the treatments that should be part of the multidisciplinary approach to obesity.

Materials and Methods

FINER criteria

Before carrying out the sub-study, the FINER criteria were considered to ensure that the project was Feasible, Interesting, Novel, Ethical, and Relevant.

This study was considered feasible because all the necessary resources were available for its development and execution; Interesting because it focuses on aspects associated with the condition that has been defined as a pandemic and, therefore, has a wide physical, psychological and social impact, and scope; Novel because it intends to demonstrate the lack of psychological treatments in centers that treat obesity; Ethical for complying with the ethical codes and having the approval of the relevant ethical committee; And, finally, suitable for studying the information available on the internet, a resource with continuous growth and significant social impact.

Google search strategy using keywords

Two different searches were carried out in Google Chrome® (https://www.google.com), a search tool justified by other authors in related studies [7, 8]. The searches were carried out using the keywords "obesity treatment," "obesity care center," and "professional obesity treatment". The three searches were done in September 2022.

Resource selection

Seventy-five resources were selected, specifically the first 25 results of each search in Google Chrome®. The number is higher

than the resources used by other authors in previous studies [9, 10].

Subsequently, a selection was carried out based on inclusion and exclusion criteria. Only websites related to medical centers were included. Informative web pages, blogs, videos, news, advertisements, dictionaries, infographics, presentations, restricted access sites, and forums were excluded. Resources with no PageRank assigned were also not included. Finally, 7 resources were excluded and a total of 68 resources were included in the study. About the 7 excluded pages, 3 were blogs, 2 were news, and 2 were advertisements.

Positioning analysis of the included

resources

Using "wmtips PageRank Checker" (https://www.wmtips.com/tools/pagerank-checker/), the positioning of each included website was studied (68 websites). The information was entered into an Excel database for subsequent analysis. The data was listed in numerical order based on its PageRank, with 0 being the lowest score and 10 the highest. Four positioning ranges were established (low, medium, high, and very high). The classification was as follows: from 0 to 2.9 low; from 3 to 5.9 medium; 6 to 8 high; from 8.1 to 10 very high (ranges established in "wmtips PageRank Checker").

Review of the treatments described in the

included pages

This analysis's objective was to determine if the option of psychological intervention was considered a treatment. A review of the treatments offered on each page was carried out (68 websites). It was also reviewed whether a psychologist was included in the center's medical team. The information was entered into an Excel database for subsequent analysis.

Results and Discussion

The resources included (66 websites) presented a high positioning (high PageRank). Only 2 resources had a medium PageRank positioning **(Table 1)**. These results reveal that the pages included in the study have high visibility and easy access and are, therefore, easily visited by patients seeking treatment Regarding psychological intervention, only 25 resources (36.76%) included psychological intervention in treating obesity. On the other hand, surprisingly, when reviewing the medical teams, only 18 centers (26.47%) had a psychologist among their employees **(Table 1)**.

	1				
Number of High Page Psychological intervention Psychologists included a websites Rank included their employees					
"obesity treatment"	20	20/100%	5/25.00%	3/15.00%	

A E / 1 . 1	D 1 1 · 1/1	• • • • • • • • • • • • • • • • • • • •	•• • • • •	
Arrovo-Fernandez et al	Psychological therai	ov in overweight and ob	sity freatment centers	do the centers include it on their websites?
inito jo i critanden er ann	r by chiorogreat aller a	by motor weight and ob	Sicy croacinonic concers.	do the conters mende it on then websites.

"obesity care center"	30	29/98.66%	13/43.33%	8/26.66%
"professional obesity treatment"	18	17/94.44%	7/38.88%	7/38.88%

More specific results can be reviewed in the following tables (Tables 2 and 3).

Table 2. PageRank summary							
	Number of websites	Very high PageRank	High PageRank	Medium PageRank	Low PageRank	PageRank (mean/SD)	
"obesity treatment"	20	0/0%	20/100%	0/0%	0/0%	7.56/1.62	
"obesity care center"	30	0/0%	29/98.66%	1/3.34%	0/0%	6.78/2.42	
"professional obesity treatment".	18	0/0%	17/94.44%	1/5.56%	0/0%	6.35/2.15	

Table 3. Summary of the main available treatments							
	Number of websites	Dietary changes	Exercise and activity	Weight-loss medication	Bariatric surgery	Psychological intervention	
"obesity treatment"	20	20/100%	15/75.00%	9/45.00%	5/25.00%	5/25.00%	
"obesity care center"	30	30/100%	20/66.66%	12/40.00%	7/23.33%	13/43.33%	
"professional obesity treatment".	18	18/100%	17/94.44%	12/66.66%	8/44.44%	7/38.88%	

As shown in **Table 3**, the approach to obesity continues to be focused on the physical sphere. The most popular treatment is dietary changes (treatment available in 100% of the centers consulted). The subsequent most common treatment is exercise and activity.

The therapeutic use of weight-loss medication is more popular than psychological intervention. Another important aspect is that the number of centers that offer bariatric surgery is very similar to the number of centers that provide psychological intervention (Table 3).

These data reveal that, as mentioned, the approach to obesity is invasive and continues to be focused on the physical sphere without considering the psychological sphere **(Table 3)**.

Nowadays, the internet has transformed the role of patients, giving them an active role in managing their health. In this stage, users do not passively use the information they obtain on the internet but sometimes make decisions based on it [11-14].

The internet is one of the primary sources for people who want to lose weight [15]. Paolino *et al.*, and other authors, reveal that 25% of the patients decide to undergo bariatric surgery based on what they have read on the internet [16, 17]. The quality of Web sites is vital since a large proportion of patients reveal that the information they find online influences their treatment decisions [18-20].

As revealed by other studies [21], in agreement with our findings, the available web resources do not always indicate all treatments nor the importance of the multidisciplinary approach, paying little attention to the risks and benefits of each treatment and the lifestyle changes.

The growth of the internet is an added challenge for health professionals and patients who are, in turn, consumers. This raises the need to identify quality information to prevent fast diets and immediate solutions that rely on vulnerable social groups. This situation could be reflected in the unstoppable increase in obesity cases, the number of relapses, or the increase in Eating Disorders cases [21, 22].

The findings of this study highlight a substantial gap in recognition of the psychological impact of this disease and a lack of knowledge of the psychologists in the approach to this condition. Our study makes visible the importance of the psychologist in the approach to obesity, a strategy focused on the physical sphere and omitting the associated psychological aspects that can sometimes act as risk and maintainer factors [23-25].

Conclusion

Nowadays, patients usually look for information on the internet before going to a private center to treat their overweight or obesity. The internet is used to choose the center they want to attend based on the treatments. This study shows that most centers that appear in the top positions of Google do not include psychology in their treatments. It is vital to have psychology within the multifactorial approach of obesity to guarantee treatment success and long-term weight maintenance.

Acknowledgments: None

Conflict of interest: None

Financial support: This study has been carried out with funding granted by Valdecilla Biomedical Research Institute through the competitive and regional program "INN-VAL" within the project code INNVAL19/10 (https://www.idival.org/en). The sponsor has not carried out any active activity within the project; it has only contributed to its financing

Ethics statement: This study is a cross-sectional sub-study of the INNVAL19/10 project. This project has the approval of the Research Ethics Committee with Medical Products of Cantabria (CEIm of Cantabria) registered with the Internal Code: 2019.090.

References

- Mahassni SH. Overweight and Obesity and the Immune System, Lipids and C-reactive Protein in Young and Middleaged Saudi Female University Workers. J Adv Pharm Educ Res. 2020;11(1):49-56.
- Haghighi-Morad M, Shakoori A, Salevatipour B. Evaluation of abdominal obesity using ultrasound and its correlation with intima media thickness in carotid arteries. Int J Pharm Phytopharmacol Res. 2019;9(5):43-7.
- Elamin MM. A Review on CRP Analysis and Obesity Influence in the Disparity of Covid-19 Pandemic. Pharmacophore. 2022:13 (1):48-55.
- Tejera C, Bellido D. «Salud digital»: tele-ejercicio en obesidad, ¿qué nos puede aportar? Nutr Hosp. 2022;39(2):245-6.
- Arroyo Fernández A. Aspectos psicológicos y complicaciones mentales. In: Obesidad, una enfermedad crónica. Editorial Médica Panamericana; 1st ed. Spain; 2022:129-38.
- Karczewski J, Zielińska A, Staszewski R, Eder P, Dobrowolska A, Souto EB. Obesity and the Brain. Int J Mol Sci. 2022;23(11):6145. doi:10.3390/ijms23116145
- Stevenson FA, Leydon-Hudson G, Murray E, Seguin M, Barnes R. Patients' use of the internet to negotiate about treatment. Soc Sci Med. 2021;290:114262. doi:10.1016/j.socscimed.2021.114262
- Keaver L, Huggins MD, Chonaill DN, O'Callaghan N. Online nutrition information for cancer survivors. J Hum Nutr Diet. 2022. doi:10.1111/jhn.13095
- Ekkel E, Seeras K. Readability of Online Patient Material Provided by Reflux Centers in the United States. Am Surg. 2021:31348211050828. doi:10.1177/00031348211050828
 - doi:10.1177/00031348211050828
- González-Soltero R, Blanco MJ, Biscaia JM, Mohedano RB, Grille-Mariscal M, Blanco MA. Análisis del contenido, posicionamiento y calidad de páginas web en español relacionadas con la nutrición y los trastornos de la conducta alimentaria. Nutr Hosp. 2015;31(3):1393-400.
- König LM, Attig C, Franke T, Renner B. Barriers to and Facilitators for Using Nutrition Apps: Systematic Review and Conceptual Framework. JMIR Mhealth Uhealth. 2021;9(6):e20037. doi:10.2196/20037
- World Health Organization. WHO Global Observatory for eHealth. MHealth: new horizons for health through mobile technologies: based on the findings of the second global survey on eHealth. 2011.
- 13. Corcelles R, Daigle CR, Talamas HR, Brethauer SA, Schauer PR. Assessment of the quality of Internet

information on sleeve gastrectomy. Surg Obes Relat Dis. 2015;11(13):539-44.

- Meleo-Erwin Z, Basch C, Fera J, Ethan D, Garcia P. Readability of online patient-based information on bariatric surgery. Health Promot Perspect. 2019;9(2):156-60.
- Bray GA, Heisel WE, Afshin A, Jensen MD, Dietz WH, Long M. The science of obesity management: an endocrine society scientific statement. Endocr Rev. 2018;39(2):79-132.
- Paolino L, Genser L, Fritsch S, De' Angelis N, Azoulay D, Lazzati A. The web-surfing bariatic patient: the role of the internet in the decision-making process. Obes Surg. 2015;25(4):738-43.
- Hernández-Reyes A, Molina-Recio G, Molina-Luque R, Romero-Saldaña M, Cámara-Martos F, Moreno-Rojas R. Effectiveness of PUSH notifications from a mobile app for improving the body composition of overweight or obese women: a protocol of a three-armed randomized controlled trial. BMC Med Inform Decis Mak. 2020;20(1):40.
- Young MT, Jafari MD, Gebhart A, Phelan MJ, Nguyen NT. A decade analysis of trends and outcomes of bariatric surgery in Medicare beneficiaries. J Am Coll Surg. 2014;219(3):480-8.
- Eysenbach G, Köhler C. Does the Internet harm health? Database of adverse events related to the internet has been set up. BMJ. 2002;324(7331):239.
- Beaunoyer E, Arsenault M, Lomanowska AM, Guitton MJ. Understanding online health information: evaluation, tools, and strategies. Patient Educ Couns. 2017;100(2):183-9.
- Perra A, Preti A, De Lorenzo V, Nardi AE, Carta MG. Quality of information of websites dedicated to obesity: a systematic search to promote a high level of information for Internet users and professionals. Eati Weight Disor. 2022;27(1):1-9.
- Jebeile H, Lister NB, Baur LA, Garnett SP, Paxton SJ. Eating disorder risk in adolescents with obesity. Obes Rev. 2021;22(5):e13173. doi:10.1111/obr.13173
- Heidari-Beni M, Azizi-Soleiman F, Afshar H, Khosravi-Boroujeni H, Hassanzadeh Keshteli A, Esmaillzadeh A, et al. Relationship between obesity and depression, anxiety and psychological distress among Iranian health-care staff. East Mediterr Health J. 2021;27(4):327-35. doi:10.26719/emhj.20.132
- Carraça EV, Encantado J, Battista F, Beaulieu K, Blundell JE, Busetto L, et al. Effect of exercise training on psychological outcomes in adults with overweight or obesity: A systematic review and meta-analysis. Obes Rev. 2021;22 Suppl 4(Suppl 4):e13261. doi:10.1111/obr.13261
- Mohd-Sidik S, Lekhraj R, Foo CN. Prevalence, Associated Factors and Psychological Determinants of Obesity among Adults in Selangor, Malaysia. Int J Environ Res Public Health. 2021;18(3):868. doi:10.3390/ijerph18030868