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Communication challenges of Primary Care physicians in cases of childhood obesity: a scoping review

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Abstract

Objective: To identify the difficulties of Primary Care physicians in communicating with, and counselling children with obesity, their parents and caregivers.

Methods: A scoping review was conducted following the PRISMA-ScR checklist. PubMed, SCOPUS, SAGE and PsycInfo databases were used to identify studies with the keywords: “childhood obesity”, “primary care physician” and “communication”, published between 2006 and 2021, in English.

Results: Out of 270 articles identified, six met inclusion criteria and were included in this review. All the included articles were assessed as high-quality studies. Findings were organized in three major themes: physician/practice barriers, patient barriers and community/resource barriers. The most prevalent challenges identified were physicians’ perceptions of lack of time, futility and inefficacy of their efforts, and perception of parental lack of motivation, resistance to change and inaccurate beliefs.

Conclusions: Primary care physicians face many difficulties managing childhood obesity cases. These are mainly related with adequately communicating with children and their parents or caregivers. Physicians may benefit from training in communication skills and child-specific obesity treatment to improve counselling of children and their families.

1. Introduction

According to the World Health Organization (WHO), nearly one in three school-aged children and one in four adolescents are living with overweight or obesity.(1) In Portugal, the prevalence of childhood overweight (29.7%) and obesity (11.9%) is above the average for the WHO European Region.(2) Additionally, recent studies indicate an upward trend in the prevalence of childhood overweight and obesity during the COVID-19 pandemic.(1)

Primary care physicians (PCPs) have a key role in identifying childhood obesity, thus the first approach to treatment often takes place in the context of Primary Care. Counselling the parent or caregiver about diet and physical activity is the first line of treatment in childhood obesity.(3-5) PCPs can use motivational interview techniques to achieve lifestyle changes in the family environment, and therefore in the child.(3, 5)

Recent evidence suggests that, although PCPs routinely screen and identify paediatric patients with obesity, follow-up of these cases in the form of counselling and/or secondary care referral is not completed. (4, 6) Understanding the challenges experienced by these physicians will contribute to adjust medical training and practice to achieve better care for patients with childhood obesity.

In the past, studies sought to identify the barriers and difficulties experienced by healthcare professionals when approaching childhood obesity.(7) Professional- and family-related factors, such as fear of damaging the doctor-patient relationship or carers' lack of motivation were identified. Additionally, cultural and societal factors such as the normalization of overweight and obesity in children, were also recognized.(6, 7)

However, of these studies, few looked specifically at Primary Care practice and, therefore, it is unclear what the particular challenges experienced by this professional group are. For these reasons, the goal of this study was to conduct a scoping review to systematically map research regarding the difficulties of Primary Care physicians in communicating and counselling children with obesity, their parents and caregivers, as well as to identify any existing gaps in knowledge.

2. Methods

Arksey & O'Malley's scoping method (8) and the PRISMA-ScR Checklist (9) were used as guidance for the design of this scoping review. The scoping method included: identifying the research question, identifying relevant studies, study selection, charting the data, and collating, summarizing, and reporting the results.

2.1. Research question

In defining the research question, the PICO framework was used. As the organization of Primary Care differs among the countries where potential studies were conducted, a broad definition of "primary care physicians" was used. Similarly, "communication challenges" as an outcome was purposely selected to permit a wide approach. As a result, the research question of this study was "What are the communication challenges of PCPs in cases of childhood obesity?".

To answer the research question, inclusion and exclusion criteria were defined. The inclusion criteria used in this review were:

(1) articles reporting on communication experiences and practices of Primary Care Physicians when counselling overweight or obese children and/or their parents and caregivers;
(2) peer reviewed, original research articles;
(3) published between 2006 to 2021;
(4) available in English.

The broad period of publishing was selected to capture the evolution of perception of childhood obesity in the past fifteen years.

Additionally, the exclusion criteria were:

(1) articles reporting on healthcare professionals other than Primary Care physicians
(2) articles reporting on physicians with specialties other than Family Medicine
(3) articles in which the background of Primary Care physicians could not be identified or in which data from these physicians could not be analysed separately from other healthcare professionals;
(4) articles that did not meet the inclusion criteria.

These exclusion criteria were selected due to the differing definitions of Primary Care physician existing in different countries. PCPs are medical providers who practice general medicine in the ambulatory setting, traditionally with a Family Medicine background. However, in some countries, the term PCP is also used for physicians with other subspecialties, such as Paediatrics or Internal Medicine, who practice in a Primary Care setting. To allow for a global analysis and broader applicability of findings, PCPs were defined as physicians who practice in a Primary Care setting, as General Practitioners or Family Medicine physicians.

2.2. Search Strategy

A comprehensive literature search was conducted in June 2022. Four databases were selected for article identification (PubMed, SCOPUS, SAGE and PsycInfo), due to their broad scope and relevant content.

The search terms consisted of permutations of keywords: “childhood obesity”, “primary care physician” and “communication”. In Pubmed, search was conducted using Mesh terms resulting in the query: ("Pediatric Obesity"[Mesh]) AND ("Communication"[Mesh] OR "Health Communication"[Mesh] OR "Communication Barriers"[Mesh]) AND ("Primary Health Care"[Mesh] OR "Physicians, Primary Care"[Mesh]). To ensure a comprehensive search, an additional search with the query “childhood obesity AND primary care AND clinical communication” was also performed. In SCOPUS multiple queries were defined in variations of “childhood obesity AND primary care AND communication”. The query “[All communication] AND [All "primary care"] AND [Title childhood] AND [[Title obesity] OR [Title pediatric]] AND [Title obesity]” was selected to search SAGE database. The search in the PsycInfo database was conducted using the query “pediatric obesity or child obesity or childhood obesity AND communication AND primary care or primary health care or primary healthcare or general practice or gp)”. Filters for year of publishing and language were applied, when available.

To screen for additional studies that were not encountered in the initial search, the “cited by” and “similar articles” feature available in several of these databases, as

well as the reference lists from the reviewed studies were also a part of the research strategy.

2.3. Study selection

The initial round of screening consisted of reviewing articles' titles and abstracts to determine if inclusion criteria were met and eliminate duplicate articles. The second round of screening entailed the review of each full text article, to confirm inclusion criteria and verify if any exclusion criteria were present. A final round was conducted to verify inclusion and exclusion criteria, as well as outcomes relevant to this review.

2.4. Charting the data

A data-charting form was developed to determine which variables to extract. For each included article, data regarding author, year of publication, study location, study type, study aims, methodology and participants, and relevant results were extracted.

Although optional in scoping reviews, quality assessment of the included studies was conducted. The Mixed Methods Appraisal Tool was used for critical appraisal of individual studies, to identify possible gaps in the quality of the existing evidence.(10)

2.5. Collating, summarizing and reporting results

After accessing the relevant results of all the included studies, a reflexive thematic analysis was conducted.(11, 12) Themes were defined by the reviewers during the extraction process and were used to report this reviews' findings.

When quantitative analysis was available, relevant results were presented as they were reported in the source study. When qualitative studies presented thematic analyses or structured results, they were extracted during data charting as they were reported in each article. When articles lacked such information, results were organized according to the following themes: physician, practice, patient, community and resource barriers.

3. Results

From a total of 270 articles initially identified, 47 duplicate articles were removed and 194 articles did not meet the inclusion criteria and were excluded after the initial screening (148 after title screening and 46 after abstract screening). Out of the remaining 29 articles, four were excluded because they were not original research articles (e.g., commentary articles), six were excluded because they did not contain relevant outcomes and 13 were excluded for not pertaining to the population of PCPs that was relevant for this review (Figure 1).

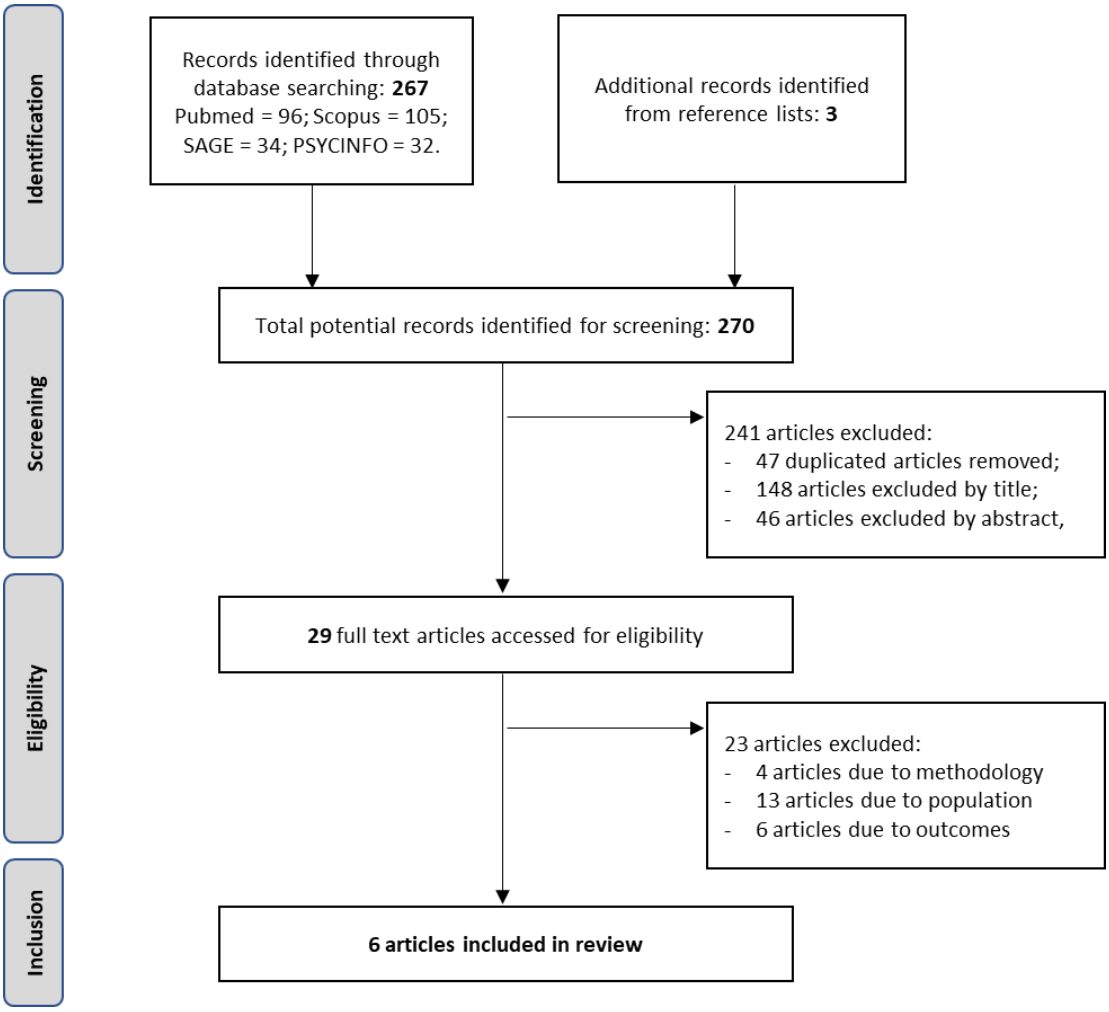


Figure 1. Study selection flowchart

Out of the six articles included in this review, five were qualitative studies and the other one was a survey. The studies were conducted in the United States of America (*n* = 2), Australia (*n* = 2) and the United Kingdom (*n* = 2) and were published between 2007 and 2021, in English.

The population in all the studies consisted of Primary Care physicians as designated in the respective countries: in United States of America these professionals are referred to as “family practice physicians”, whereas in Australia and in the United Kingdom the term “general practitioners” is used. Three of the articles also included other medical professionals in their population, but data pertaining to PCPs were available to be extracted and analysed separately. In total, 223 PCPs were included in this review.

All the included articles were assessed as high-quality studies, using the Mixed Methods Appraisal Tool (Table 1).

Table 1. Mixed Methods Appraisal Tool applied to the included studies

Qualitative Studies					
Articles	Is the qualitative approach appropriate to answer the research question?	Are the qualitative data collection methods adequate to address the research question?	Are the findings adequately derived from the data?	Is the interpretation of results sufficiently substantiated by data?	Is there coherence between qualitative data sources, collection, analysis and interpretation?
Hersch DE et al (2021).(13)	Yes	Yes	Yes	Yes	Yes
Jones KM et al (2014). (14)	Yes	Yes	Yes	Yes	Yes
Turner KM et al (2009). (15)	Yes	Yes	Yes	Yes	Yes
Walker O et al (2007).(16)	Yes	Yes	Yes	Yes	Yes
King LA et al (2007).(17)	Yes	Yes	Yes	Yes	Yes
Quantitative Descriptive					
Articles	Is the sampling strategy relevant to address the research question?	Is the sample representative of the target population?	Are the measurements appropriate?	Is the risk of nonresponse bias low?	Is the statistical analysis appropriate to answer the research question?
Nelson JM et al (2015).(18)	Yes	Yes	Yes	Yes	Yes

Data extracted from the included articles are summarized in Table 2.

Table 2. Articles included in the Scoping Review.

Author, Year, Location	Study type, methodology and participants	Aims of the study	Results
Hersch DE et al (2021).(13) **Minnesota, USA**	Qualitative study, semi-structured interviews. 20 Primary care physicians	"To describe PCPs preferences and behaviours regarding weight-related conversations with paediatric patients' and their families."	When do primary care physicians shy away from initiating weight-related discussions? Type of visit: Acute or non-well-child visits (*n* = 14; 70%); First encounter (*n* = 3; 15%); Time constraints (*n* = 9; 45%) Time: Competing visit priorities (*n* = 10; 50%)
Nelson JM et al (2015).(18) **Georgia, USA**	Survey 143 Family Practice physicians (FPs), out of 665 participants	"To assess the baseline perceptions and practices of Georgia's paediatric PCPs regarding lifestyle and weight related counselling done during well-child visits and determine the extent to which these perceptions and practices vary by provider type."	Perceived Barriers to Lifestyle Assessment and Management: Physician/practice barriers: insufficient time (70.6%), inadequate training (18.2%), inadequate reimbursement (32.2%). Patient barriers: lack of patient interest (34.3%), perceived difficulty for patients to change their behaviours (21%), fear of offending patient (3.5%), resistance from parent/caregiver (11.9%). Community/resource barriers: inadequate referral services (41.3%), lack of effective tools and information to provide patients (28.7%), lack of effective treatments (16.1%). When compared to paediatricians, FPs were more likely to report insufficient time (71% *vs*. 60%; $p = 0.01$), inadequate training (18% *vs*. 10%; $p \leq 0.02$) and less likely to report parent/caregiver resistance (12% *vs*. 35%; $p < 0.001$).
Jones KM et al (2014). (14) **Australia**	Qualitative study, semi-structured interviews. 10 GPs	"To explore the perceptions and experiences of treating childhood obesity of GPs and families."	Raising the topic of obesity: Difficulties due to "the sensitivity of the topic" or "the possibility of leading to conflict". Fear of the psychological impact on the child. Parents being offended or dismissive. Parents beliefs about obesity. Frustrations experienced by the GPs: Issues around family dynamics, lack of compliance and follow up. External influences, such as advertising. Practice-based issues, such as few resources available to help parents, lack of time and other issues more pressing to approach.
Turner KM et al	Qualitative study, unstructured	"To explore professionals' views on primary care as a	Physician/practice barriers: Lack of time during visits and limited appointment times. Visits not scheduled to

(2009). (15) **Bristol, England**	interviews. 12 GPs, out of 30 participants	setting in which to treat childhood obesity.2	discuss the child's weight: feeling it would be inappropriate to broach the subject of a patient's weight unless it affected the problem the child was presenting with or need to prioritise the problem the patient was concerned about. Limited expertise in providing child-specific advice. Fear of upsetting the child or parent. Sense of little impact/efficacy in reducing a child's obesity. Patient barriers: Parents becoming defensive or denying obesity as a problem. Parents being unable to implement changes in lifestyle, due to lack of knowledge, money, or time. Obesity treatment not a priority for families. Parents also overweight/obese, normalising obesity within the family. Community/resource barriers: Feeling that there was no effective treatment or referral options to offer, and no incentives to encourage behavioural change.
Walker O et al (2007).(16) **United Kingdom**	Qualitative study, semi-structured interviews. 12 GPs, out of 18 participants	"To explore the views of GPs and practice nurses concerning childhood obesity in one district in the north of the UK."	Physician/practice barriers: Lack of time. Feeling that the problem was just too difficult to tackle/of too large scale to make a difference. Sense of little impact of their advice in reducing a child's obesity. Fear of upsetting the child or the parent. Fear of the psychological impact on the child. Fear of jeopardising their relationship with the family. Patient barriers: Family unwilling or unable to take on the responsibility of lifestyle changes. Community/resource barriers: Lack of resources.
King LA et al (2007).(17) **Australia**	Qualitative study, focus groups. 26 GPs	"To elucidate the extent to which GPs perceive overweight as a threat to the health of young people, causal factors that they identify, actions they consider might be most helpful, barriers to effective management they experience, and perceptions about their roles and responsibilities, sense of self-efficacy, and commitment to action."	Physician/practice barriers: Limited consultation time. Low expectations for patient compliance and success. Sensitive topic. Fear of alienating families. Fear of the psychological impact on the child and of issues associated with eating. Patient barriers: Parents' lack of knowledge on healthy lifestyle. Parental attitudes that link nurturing and eating. Parental modelling of poor eating practices and overweight/obesity. Parental denial or defensiveness about their children's weight. Community/resource barriers: Difficulty to raise an issue for which there was no service available for the family. Barriers to access dietitian services. Environmental influences such as increasingly sedentary habits, availability of energy-dense food and advertising.

FPs – Family Practice physicians; GPs – General Practitioners; PCPs – Primary Care physicians

A thematic analysis of all the included studies (13-18) resulted in the definition of three themes which informed the areas of challenges experienced by PCPs in childhood obesity cases: physician and practice barriers, patient barriers, and community and resource barriers.

3.1 Physician and practice barriers

The majority of factors identified by PCPs as challenges pertained to barriers within their place of practice or limitations faced on an individual level.

Time constraints were unanimously pointed as a challenge for PCPs in childhood obesity cases. One study (18) reported that PCPs were more likely than other professionals to report lack of time as a perceived barrier and that this was the most often cited difficulty for assessment and management of childhood obesity. Besides lack of time for an adequate approach to the topic, other perceived health priorities during the appointment limited the availability of physicians to even address obesity as a health concern, as well as a difficulty to raise the topic when it was not the reason for the visit (14, 15). Additionally, a limited number of appointments to offer adequate follow up and type of consultation (acute disease *versus* regular routine visits) were also barriers to engaging in this issue, leaving PCPs, in some cases, to avoid it altogether.

Although Primary Care physicians are considered to be well equipped to provide information about overweight, obesity and their health consequences,(3, 5) there was no consensus in the reviewed studies regarding providing advice related with diet and physical activity. Some studies pointed to physicians' perception of their lack of knowledge to be able to offer specific and detailed counselling in the context of paediatric patients (15) and inadequate training. (18)

A recurring theme among the physicians was the sense of futility in counselling families and pessimism as it regards their approach resulting in positive lifestyle changes and weight loss in children.(15-17) The fear of a negative reaction from parents and children was also a frequent theme in this review, due to the "sensitive" nature of the topic, (14, 16, 17) which might generate conflict, alienate or upset the parents or caregivers. (15, 16, 18) Finally, physicians expressed concern about the

possible psychological impact of addressing the issue with children, mentioning depressive symptoms or disorders related with eating that discussing the topic would conjure or aggravate.

3.2 Patient barriers

An almost ubiquitous theme in the included studies was parental reactions and behaviours, as perceived by PCPs. Physicians reported that, in their experience, many parents reacted with resistance to the topic of childhood obesity, sometimes being offended or dismissive of the concern raised in the visit. (14, 15, 17, 18)

The perception of the PCPs as to the reason for these parental reactions were varied. The studies pointed to an overall lack of interest of patients and/or their parents in the topic, when it was raised by the physician. (14, 15, 17, 18) Many PCPs had the perception that treating obesity was not a priority in family dynamics and, as such, families were unwilling or unable to change their lifestyles.(14-16) Some also highlighted parental beliefs about childhood obesity, including the perception that being overweight/obese as a child was healthy and not a problem.(14, 15) The normalisation of childhood obesity was stated as a possible consequence of overweight/obese parents themselves and unhealthy habits in the whole family. (14, 15, 17)

Additionally, one study pointed to PCPs' perception of lack of compliance with the proposed changes by the families, which discouraged PCPs from further addressing childhood obesity in their practices.(14)

3.3 Community and resource barriers

A lack of resources was also a common issue raised by PCPs in most of the studies reviewed. (14-18) Physicians pointed to inadequate referral services or lack of other professionals to assist in childhood obesity cases, such as dietitians or child psychologists, as well as lack of tools, information or effective treatment options to provide to patients.

Monetary issues were mentioned in some of the studies, ranging from concerns of physicians regarding health insurances (18), parental difficulties in affording healthy

foods or sports (15) or in accessing dietitian services (17). Although health costs and systems are particular to each country, this theme was included in the data-charting because it might be an important topic for reflection in some countries, regarding the access of the community to Primary Care and to child obesity care.

4. Discussion

Although childhood obesity appears to be multifactorial in nature, environmental and behavioural risk factors have been established. Additionally, the association between parental obesity and childhood obesity has been established in literature. (5, 19) Family-based interventions have been proven effective and are recommended in treating childhood obesity. (3, 5, 20) General practitioners/Family Medicine physicians are in a unique position to be able to screen and manage these situations due to their relationship with the entire family.

The main purpose of this scoping review was to identify the challenges experienced by Primary Care physicians in communicating with, and counselling children with obesity, as well as their parents and caregivers.

The results of this review indicate that the major challenge experienced by PCPs in cases of childhood obesity is communicating adequately with children and their parents or caregivers. It begins with the physicians' perception of lack of time to properly address the topic and of futility and inefficacy of their efforts. Additionally, communication with parents and caregivers is experienced by PCPs as difficult due to the perception of a lack of motivation, resistance to change and inaccurate beliefs.

Most of these issues can be addressed with the appropriate communication techniques. Initiating the discussion with children and parents was a point of concern for PCPs, due to the sensitive nature of the topic. Physicians can utilise communication strategies to introduce these conversations, such as open-ended questions, non-judgmental language, and reflective listening. Additionally, motivational interviewing has been used as an effective and evidence-based approach to childhood obesity, by encouraging children and families to identify and enact desirable lifestyle changes.(3, 5, 6, 21) Primary care physicians are in an optimal position to be effective in motivational interviewing techniques, due to their experience and established rapport with families prior to talking about obesity, which can act as a facilitator in assessing the stage of change, supporting autonomy and providing follow up.

4.1. Strengths and limitations

Most relevant studies found in the database search evaluated other Primary Care providers in addition to physicians. Few studies focused specifically on physicians, and often assessed both Paediatrics and Family Medicine specialists together. These different types of PCPs have different training, areas of expertise and approaches to childhood obesity, which makes results difficult to extrapolate to countries with a clearer separation of practices. Focusing specifically on General Practitioners/Family Medicine physicians, this review provided a more accurate analysis of the challenges experienced particularly by these healthcare professionals.

The findings of the studies included in this review pointed to similar challenges identified by PCPs in communication with obese children and their parents or caregivers. However, nearly all studies adopted qualitative approaches and only one study consisted of a quantitative survey, which limits conclusions as to how widespread PCPs' identified challenges are. Due to the nature of interview-based studies, with findings being self-reported by interested participants, conclusions may not be generalized. The lack of studies focused on Primary Care physicians and adopting quantitative methodologies were thus identified as important gaps in the literature.

Additionally, with all the studies included taking place in English-speaking countries, the perspective of PCPs practicing in differing cultural contexts is lacking. This represents both a limitation of this review, as well as a future research opportunity.

Future studies are necessary to illustrate how widespread PCPs' identified challenges are and how such challenges vary with PCP's characteristics, such as time of practice, gender, place of practice or training, no name a few.

As evidenced in this review, there is the need for further quantitative studies assessing the challenges and necessities for Primary Care physicians to improve management of childhood obesity cases.

4.2. Practice implications

Even though physicians are equipped, in medical schools and clinical residency programs, to address this issue, childhood overweight/obesity was considered as a sensitive topic and difficult to raise with parents and caregivers. PCPs' training, both in the specific care of childhood obesity and in communication strategies, is an essential part of overcoming the barriers identified. As such, medical curricula should permit the continuous improvement of these skills, not only during university and residency, but throughout PCPs' careers.

Additionally, the creation of appointments dedicated to address childhood obesity in Primary Care, may be a way to increase PCPs' time availability. However, to address other resource barriers identified, a multidisciplinary approach with the support of other professionals is desirable, so that the burden is not placed only on physicians and better results are achieved.

4.3. Conclusion

One of the foundations of Primary Care is preventive medicine. Reducing the prevalence of childhood obesity represents decreasing large numbers of present and future comorbidities. (1, 3, 5) Primary Care physicians have an important role in addressing childhood obesity due to the longitudinal care that they provide to their patients, as well as their relationship with the family as a whole. However, to be able to address obesity in children in an effective manner, time, training and resources are essential, as shown in this review.

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The author has no conflicts of interests to declare.

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