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Pregnancy and weight gain: a scoping review of women's perceptions and experiences with stigma

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Abstract

Background Weight stigma can impact any woman who considers herself as overweight, regardless of BMI. Pregnant women are at risk of experiencing stigma related to weight which harm their physical and mental health. To support and guide on healthy weight gain during pregnancy, it is important to explore women's perceptions and experiences of weight related stigma. This can inform programs and policies to improve maternal and child health outcomes.

A scoping review on this issue will provide valuable insights, identify gaps in current research, and establish a foundation for informed interventions.

Methods A search syntax was created to retrieve the relevant results from PubMed and Google Scholar. A scoping review was undertaken of published peer reviewed research indexed in these databases, which were written in English, and focused only on primary studies. The methodology for this scoping review was based on the framework proposed by Arksey and O'Malley (2005) and the subsequent recommendations provided by Levac et al. (2010).

Results From a total of 3109 articles identified using search terms, 85 articles were included for review. There are four themes in this scoping review: pregnant women's perceptions and experience with healthcare givers; pregnant women's experience with family and friends; pregnant women's experience with other members of society; and pregnant women's experience with the media. Weight stigmatization can hinder the communication between healthcare providers and women leading to misunderstanding and compromising the quality of care. This can prevent women from seeking necessary care. Stigmatizing behavior of friends, family and the perpetuation of stigma in the media influences how women perceive their pregnancy weight gain, intensifies feelings of shame, isolation and negatively impacts women's mental well-being and body image during pregnancy.

Conclusion This scoping review examines the perceptions and experiences of weight stigma among pregnant women, focusing on their interactions with healthcare providers, family and friends, other members of society and stigma perpetuated by the media. The review gives an insight into how weight stigma can heighten women's stress and also leads to the avoidance of essential medical care, which affect the health of both the mother and the child. Addressing stigma from various sources is crucial for the general well-being and health of both women and children.

Keywords Pregnancy, Weight gain, Stigma, Scoping Review

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Introduction

It is estimated that about 38% of the world population is expected to be affected with obesity by the year 2038 [1]. The prevalence of obesity in women of reproductive age is on a steady rise across the globe [2]. Over the past decade, there has been a significant shift in the demographics of pregnant women, with more women being overweight or obese at conception [3]. Gestational weight gain (GWG) is prevalent among women who conceive at a higher Body Mass Index (BMI) [4]. Women who gained excess weight during pregnancy are likely to report uncertainty regarding the appropriate amount of weight they should gain or to cite a target figure that is higher than the established guidelines [4]. The Institute of Medicine (IOM) has recommended ideal GWG for pregnant women. According to IOM guidelines, total GWG should be within 12.7 - 18 kg for underweight women, 11.3 - 15.9 kg for normal weight women, and 6.8 - 11.3 kg for overweight and 5 - 9 kg for obese women [3, 4]. It is estimated that about 50% of women gain excess weight during their pregnancy than recommended [5]. Obesity in pregnancy affects both mother and child, and women with obesity in particular feel vulnerable during this time [6].

Women continuously receive advice on how their body appears, behaves and functions from various sources like the media, health systems and other sections of society. Women face incr eased scrutiny, monitoring, control and evaluation of their weight during pregnancy [7]. There appears to be a growing global trend of heightened stigma and societal scrutiny directed towards individuals with heavier bodies, especially among women living in advanced economies [8]. These women frequently describe experiencing persistent pressures to adhere to standards of thinness with many internalizing the barrage of societal messages that link weight to failure, weakness, indulgence, idleness and other moral deficiencies [8]. Additionally, there are misconceptions regarding their lifestyle behavior, with some assuming laziness without valid basis [9].

During pregnancy the most common sources of weight stigmatizing experiences come from society, media, immediate relatives and strangers [10]. Qualitative studies indicate that overweight and obese maternity care consumers perceive discrimination based on their weight and reported negative interactions with care providers who were perceived as rude, dismissive, and unresponsive to their needs [11]. These women felt embarrassed, isolated, and inadequately informed about health behaviors during pregnancy, attributing this treatment to their larger body size, suggesting the presence of weight stigma in maternity care [11]. When a woman is reminded in a stigmatizing way that her weight will make childbirth harder, harm her baby, or damage the mother–child relationship, it can trigger key aspects of pregnancy anxiety and increase associated risks [8]. Weight stigma experienced by pregnant and postpartum women is associated with increased GWG and postpartum weight retention [8]. It can also impact any woman who considers herself overweight, regardless of her actual BMI. All pregnant women might be susceptible to weight stigma and its associated consequences [12]. Consequently, weight-stigmatizing remarks are not only unkind and distressing but also unproductive. These remarks may even drive women to engage in potentially unhealthy and dangerous behaviors such as deliberately restricting weight gain during pregnancy, which can put the child at risk of low birth weight and pre term birth [13].

A scoping review on weight stigma during pregnancy aims to provide valuable insights. This will also help highlight the gaps in the existing body of knowledge on the topic and would further identify key concepts, types and sources of evidence to inform practice, policymaking, and research [14].

Methods

Research question

This review was guided by the research question: What are the perceptions and experiences of pregnant women regarding weight stigma?

The study was conducted by a team of three researchers trying to map the available literature on women's perceptions and experiences of stigma in relation to pregnancy and weight gain. The methodology for this scoping review was based on the framework proposed by Arksey H and O'Malley L (2005) [15] and the subsequent recommendations provided by Levac D et al. (2010) [16]. This method offers recommendations to improve each stage of scoping reviews, thereby promoting consistency in how researchers conduct and report these studies [16].

The review was divided into a five-stage methodological framework [15] comprising of the following steps: (i) identification of research question (ii) identification of relevant research articles (iii) study selection (iv) charting the data (v) collating, reporting, and summarizing the findings [15]. The optional 'consultation exercise' of the framework was not carried out as the core objective of the study was effectively achieved through a comprehensive review of existing literature.

Search strategy

A literature search was conducted on 9 April 2024 for "PubMed" and on 13 April 2024 for "Google Scholar" to identify the relevant studies. The database search was not limited in terms of time. A search syntax was developed to retrieve the most relevant results from PubMed

and Google Scholar (Addendum 1). We retrieved 2,912 articles from PubMed and screened the first 20 pages of results from Google Scholar. The search for articles was reported using Preferred Reporting Items for Systematic reviews and Meta-Analysis (PRISMA) extension for Scoping Reviews (PRISMA-ScR) Checklist [17].

Study eligibility criteria

Inclusion and exclusion criteria developed to guide the selection of the research articles are summarized below. The search included all the primary studies that specifically focused on pregnant women, irrespective of the study designs. Only articles published in English and sourced from peer reviewed journals were considered for inclusion. Paid articles that could be accessed through institutional library and other free online platforms were included in the review.

The exclusion criteria for the current scoping review were as follows: biomedical articles/ literatures, secondary studies and animal studies. Articles that were not in English language, as well as editorials, conference abstracts and conference presentations were excluded from this review. A total of six paid articles that could not be accessed through institutional library and other free online platforms were also excluded from this scoping review.

Screening process

The current review followed a two-step screening process in selecting the studies.

Title and abstract screening

In the first step, two reviewers (HS & AB) screened independently the titles and abstracts of all retrieved studies. Titles that did not have an abstract were included for further assessment of the full article during the data charting step. Reviewers virtually met throughout the screening process to resolve issues and discuss any uncertainties regarding study selection.

Full text screening

In the second step, the same reviewers read independently the full texts of studies included from the first step. Any disagreements between the two reviewers were resolved through consulting a third reviewer (MM).

Data extraction

A data extraction sheet was collectively developed by the two reviewers (HS & AB) with inputs from the third reviewer (MM).

Study quality assessment

Scoping reviews differ from systematic reviews as they cover broader themes and incorporate papers with a variety of study types [18]. As a result, scoping reviews rarely assess the quality of the included studies [18]. Therefore, we have not assessed the quality of the studies included in the review.

Data synthesis

The extracted data were presented using narrative technique [19]. The study's authors classified the studies on the following domains to be included in the final analysis (see Table 1). The domains were informed inductively during the full text review of the included studies.

Results

Selection of studies and evidence synthesis

A total of $n=3109$ articles were retrieved from the initial database search of PubMed and Google Scholar [20]. Both search engines yielded significant number of articles with 2912 from PubMed and 197 from Google Scholar after screening the first 20 pages of results. The search engine displays results based on relevance, as mentioned by Taylor J and Pagliari C (2018) [21]. After removal of duplicate articles, the count was 3030 articles. Following the title and abstract screening, 653 articles were included and after full- text screening, 117 articles

Table 1 List of selected domains for data extraction

Domains	Definition
Weight stigma	Weight stigma is the negative attitudes and discrimination towards individuals based on their body weight
Pregnant women's experience with caregivers (Healthcare stigma)	Experience of pregnant women with caregivers regarding weight stigma
Pregnant women's experience with family and friends	Experience of pregnant women with family, near relatives and friends regarding weight stigma
Pregnant women's experience with society	Experience of pregnant women with society regarding weight stigma
Pregnant women's experience with media	Experience of pregnant women with media regarding weight stigma

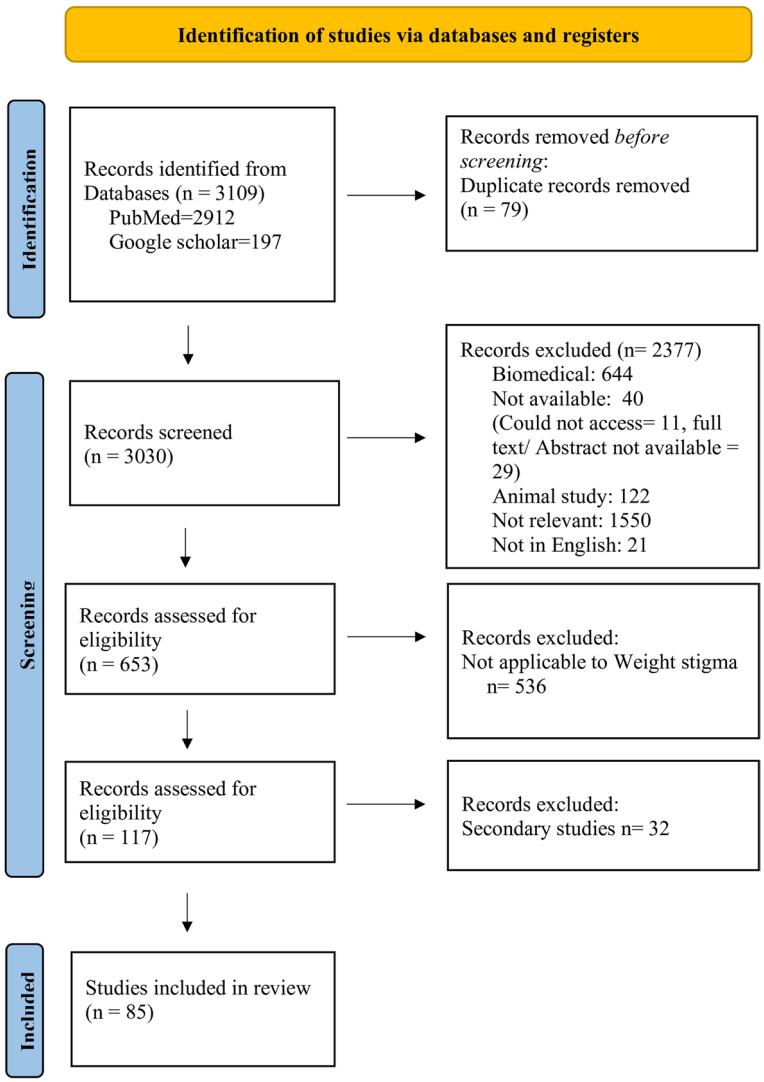

Fig. 1 PRISMA 2020 flow diagram

related to weight stigma were identified. Out of these, 32 articles were excluded since they were secondary studies. The total number of included articles in the scoping review is 85 (Fig. 1: PRISMA 2020 flow diagram showing the identification and selection of studies). As on 13 February 2025, no article has been retracted.

Included studies

The lists of studies discussed in this review are presented in Addendum 2 with the assigned study number that is used as the study identifier (Study ID). The table also contains the information including the essential descriptive domains of information extracted from each study.

Study characteristics

The included articles were extracted using the following criteria: year, location, and study type. Table 2 summarizes the characteristics of the studies. This review comprised of 85 articles, with a significant number published in 2021 [$n=10$, (12%)] and 2022 [$n=10$, (12%)]. The majority of the studies were undertaken in the UK [$n=22$, (26%)] followed by Australia [$n=14$, (16%)] and the USA [$n=14$, (16%)]. It was observed that most of the studies were carried out in developed countries, as classified by the Department of Economic and Social Affairs of the United Nations Secretariat (UN/DESA) [22]. All the 85 articles identified were primary studies, of these,

Table 2 Study characteristics

Study Characteristics	Number of Studies (%)	Study ID
Year		
2024	4 (5)	14,19,39,65
2023	5(6)	1,53,54,58,71
2022	10(12)	2,30,35,60,67,74,82,83,84,85
2021	10(12)	10,13,16,17,29,46,48,59,68,73
2020	8(9)	5,7,9,24,28,40,42,72
2019	3(3)	3,52,77
2018	5(6)	21,25,50,51,56
2017	9(10)	12,33,37,57,61,75,76,80,81
2016	5(6)	4,15,41,49,62
2015	2(2)	31,34
2014	3(3)	36,45,47
2013	8(9)	6,18,20,26,27,38,43,69
2012	4(5)	11,23,32,55
2011	5(6)	22,44,66,70,78
2010	1(1)	79
2009	1(1)	8
1997	1(1)	63
1994	1(1)	64
Location		
USA	14(16)	1,3,4,8,13,23,24,36,40, 59,71,73,74,82
USA & Canada	1(1)	2
Canada	7(8)	11,12,48,58,68,72,83
Sweden	4(5)	5,47,56,79
Australia	14(16)	6,9,10,18,20,32,33,38,42,44,52,54,77,78
UK	22(26)	14,15,22,25,27,30,34,37,41,45,55,61, 62,63,64,66,69,70,75,76,80,81
Finland	1(1)	17
Ghana	2(2)	16,49
Norway	4(5)	19,35,39,85
Denmark	6(7)	21,26,43,50,60,84
Iran	1(1)	28
Colombia	1(1)	29
Taiwan	1(1)	46
Brazil	1(1)	31
Turkey	2(2)	51,67
Japan	1(1)	53
New Zealand	1(1)	57
China	1(1)	65
Ireland	1(1)	7
Methodology		
Qualitative	63 (74)	7, 9, 12, 13, 15, 16, 17, 18, 19, 21, 22, 23, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 39, 40, 41, 42, 43, 44, 45, 46, 47, 49, 50, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 66, 67, 68, 69, 70, 71, 72, 74, 75, 76, 77, 78, 79, 80, 82, 83, 84, 85
Quantitative	14 (17)	1, 2, 3, 4, 6, 11, 14, 20, 24, 32, 51, 64, 65, 81
Mixed- methods	8 (9)	5, 8, 10, 38, 48, 52, 63, 73

63 studies were qualitative studies, 14 were quantitative studies and 8 were mixed-methods studies, contributing to 74%, 17% and 9% of the included studies respectively (Table 2).

Themes

The following four themes were generated: *Pregnant women's perceptions and experiences with healthcare givers, Pregnant women's experience with family and friends,*

Pregnant women's experience with other members of society, Pregnant women's experience with media.

Pregnant women's perceptions and experiences with healthcare givers

Studies on women's experiences with healthcare providers highlight significant concerns related to stigma and negative attitudes, for women with obesity during pregnancy. More than half of these studies (65 out of 85) found evidence of stigmatization of women by healthcare givers. Out of these 65 studies most of the research took place in developed economies with 19 studies conducted in the UK, 12 in Australia, and 10 in the USA. Two-thirds of the study participants in the study "Weight Stigma Among Pregnant and Postpartum Women: A New Context of Stigmatization" revealed that healthcare professionals have made negative comments about weight, contributing to the stigmatization experienced by obese pregnant women in healthcare settings [10].

Pregnant women with obesity reported unpleasant encounters with healthcare providers and the stigmatization of individuals is wide spread in society, including healthcare settings [23]. They experienced guilt over the potential health risks to themselves and their baby, including fears of medical complications [24]. Jensen SD et al. (2021), in their qualitative study on 'Ambivalence and moral dilemmas in women's lived experiences of obesity and pregnancy', described a stigmatizing experience where a physician referred to statistics to inform the woman about her risk of retaining weight postpartum. The woman responded by distancing herself, explicitly stating that she had gained only less than 10 kilos during pregnancy [25]. In a study on 'Exploring weight bias internalization in Pregnancy', it was found that pregnant women with higher weight or obesity face significant weight stigma from healthcare providers [26]. Similarly, women with obesity frequently report negative experiences in antenatal care including being treated without respect, care, understanding, or honesty [11]. In another study, the authors interviewed 18 postpartum women, and found that participants frequently felt talked down to, were told "what to do," and felt judged by their perinatal primary care providers [27].

Additionally, a repertory grid study indicated that women with a higher BMI often feel being depersonalized by the medical care and they perceive their own well-being is being ignored in favor of their fetus [28]. Cruickshank AH et al. (2019) in their qualitative study highlighted that one Samoan mother expressed stigma often is due to preconceived ideas and generalizations about unhealthy food habits, big babies and diabetes leading to cynical remarks [29].

A study conducted on Māori and Pasifika women in Logan, Australia, highlighted the stigma they face in healthcare settings [29]. Pregnant women often felt judged based on assumptions about their character, such as greed, intelligence and laziness [30] as well as their behaviors like eating too much and not exercising [26, 30]. Women have expressed sensitivity regarding their weight and shared negative experiences when attending clinics [31]. A qualitative study by Goldstein RF et al. (2020) on health professionals perspectives highlighted insights from a nurse unit manager who noted that it was occasionally reported by pregnant women that they did not want to make appointments or see the healthcare provider again [31].

In a web survey conducted among midwives and obstetricians in Swedish maternity clinics, one-third found obesity to be a more sensitive topic than smoking or alcohol habits [32]. About 17% admitted that they sometimes avoid discussing weight to prevent making the pregnant women feel worried or ashamed [32]. As noted by Schmied VA et al. (2011), a phenomenon termed as 'struggling to fit in' was identified [33]. This indicated that women experience difficulty fitting into chairs, gowns, blood pressure cuffs and examination tables in healthcare clinics [33]. The physical challenges led to feelings of sadness and hurt, further complicating their healthcare experiences [34].

Pregnant women's experience with family and friends

Ten studies out of the 85 studies explored the experiences of pregnant women with family and friends related to weight stigma. Four studies discussed women's experience of weight stigma with friends, four studies discussed women's experience with family and two studies discussed women's experience with both family and friends. Of the ten studies most of the studies were conducted in the USA ($n=4$) & Australia ($n=2$). There was one study each from Canada, China, Norway and Africa.

A pregnant woman's perception of body image during pregnancy is significantly influenced by her closest and most trusted individuals like her family members. It was found that negative attitudes from family members towards pregnancy weight gain was directly linked with body image dissatisfaction in pregnant women [35].

In the study by Nagpal TS et al. (2022), the participants were asked to indicate how often they experienced weight stigmatizing remarks from close relations [34]. The response option ranged from less than a month to three times or more daily [34]. The study also found that women often encountered stigmatization from family and friends regarding their health behavior, such as diet or exercise-based on their pregnancy weight gain

[34]. Some women reported being told by their mothers to watch what they eat during pregnancy to avoid gaining more weight, or being reminded by their husbands to eat healthily and exercise more [34]. Some participants noted that friends and family members made comparisons to what they perceive as ideal pregnancy weight gain [34]. Some remarks include being told that she should be bigger than she is, and she isn't showing enough or that she is already too big [34]. Women are pressured by family and peers to lose weight immediately after delivery as depicted by some mothers and celebrities who seem to lose weight automatically and easily [36].

Incollingo Rodriguez AC et al., (2019) reported 64.9% of pregnant women experienced weight stigma from at least one source. Of these 21% of stigma were attributed to immediate family [8]. Nagpal TS et al. (2022) reported that some women noticed their family and friends had preconceived ideas about how they should eat and gain weight during pregnancy, when they are already obese [34]. Also, they have a prejudged expectation on how an obese pregnant woman should look during their pregnancy [34]. The study revealed that pregnant women are subjected to weight stigmatizing remarks from family, friends and close relations including partners [34].

Pregnant women's experience with other members of society

Out of 85 studies, 18 studies focused on women's experience of social stigma regarding weight during pregnancy. Out of these, five studies were done in the UK, four from USA, two studies each from Ghana and New Zealand, and one each from Canada, China, Japan, Sweden, and Turkey. Overweight is considered undesirable by most women, who face social stigma like being called uncomplimentary names [37]. Included studies also highlight the social stigmatization of fatness experienced by obese people in Western society, showing how it functions as a health risk by contributing to poor body image and creating barriers to fat people's participation in recreational activities [38]. Parker G (2017) in his study mentioned that the experience of pregnant fat embodiment were shaped by factors of privilege and oppression, particularly in relation to race and class [38]. For instance, participants with lower household incomes expressed frustration at being unable to afford recommended lifestyle practices by healthcare providers for weight management, such as gym and fresh produce like fruits and vegetables. Some participants of color also described feeling that the politics and practices surrounding their bodies were influenced by these intersecting social factors including the expression of long-standing racism and eugenic policies [38]. In a study on weight stigma in pregnant and postpartum women in the USA, society was identified as one of the sources of weight stigma experiences, which accounted for 33.9% out of 64.9% of the total participants who reported experiencing stigma from at least one source [8]. A study on primigravidae, noted that overweight women face continuing social stigma than normal weight women [34]. A woman in the study shared that people probably think that she was using her pregnancy as an excuse to eat more and indulge [34]. The woman also mentioned pregnancy is socially acceptable but being fat is not. Women experiencing negative change is due to the gap in knowledge between the shape of the body during advanced pregnancy and society's ideal female shape [34]. A study, based on semi structured interviews with 14 women who attended an outpatient maternity clinic in Turkey, found that they faced stigmatization and humiliation by the people around them because of being overweight [39]. Some participants reported that due to such negative experiences, they restricted themselves from social lives and limited their activities such as going to the park [39]. In a study on pregnant women with BMI higher than 35, it was found that women shared their experience of being stared at by adults and children, and had overheard disparaging conversations from the public [40]. They also discussed an incident where a passerby in the hospital commented on their weight, when she was talking with one of the interviewers [40]. Social stigma is pervasive and it has a significant impact on employment settings, peer relationships and media portrayal [28].

Pregnant women's experience with media

Out of 85 studies on weight stigma, 11 articles identified media as a source of stigma for pregnant women. Three studies were conducted in the USA, three in Denmark, two in England (UK), and one each in Canada and Norway and one study was conducted both in USA and Canada. Evidence has suggested that pregnant women experience weight stigma from various social settings like the media [26]. Nippert KE et al. (2020) in their study found that 72% images of overweight or obese people in online news articles were stigmatizing [41]. Media is one of the notable environments that perpetuate prenatal weight stigma [26].

The study by Incollingo Rodriguez AC et al. (2019), reported that 24.6% experienced weight stigma from the media out of the 64.9% of the sample, which reported experiencing stigma from at least one source [8]. It was revealed that women experienced an average of 11 stigmatizing events in one week, with the most common source of weight stigma as media [41]. The most stigmatizing content types included images or photographs and written communications or opinions [41].

Some women reported that they felt ugly or awful because of the contents in the media [41]. Women also felt stigmatized by the ideal pregnant body presented in media and through comparisons with other pregnant or postpartum women [41], and pregnant celebrities [42]. These representations reinforced by media imagery created pressure to maintain thinness throughout pregnancy [43].

The pregnant women reported experiencing weight stigma from the media on an average between once a week to few times a week [41]. The media messages portray new mothers who gain and keep weight postpartum, as lazy or as having let themselves go [8]. In the study by Dieterich R et al. (2021), also reported pregnant women feeling stigmatized during their interaction with the media [27]. The media's focus on obesity may lower self-esteem and discourage obese individuals from losing weight [44].

Discussion

This scoping review, guided by the framework proposed by Arksey H and O'Malley L (2005) [15] systematically examines the stigma surrounding pregnancy weight gain and women's experiences across various sources such as healthcare providers, family, society and media. The review follows the first five steps of the framework to identify relevant studies, extract key data and synthesize the findings to provide a comprehensive understanding of the weight related stigma on women's well-being. The subsequent recommendations provided by Levac D et al. (2010) [16] clarify and enhance each stage of the frame work and synthesized evidence from 85 peer-reviewed primary articles indexed in PubMed and Google Scholar on the topic. The pervasive nature of stigma across healthcare, among family and friends, in society and the media has been found. Critical gaps in research and practice are highlighted that require further attention.

Across the 85 included publications, majority of the studies were found to take place in high income countries [22] with 22% in the UK, 16% in the USA and Australia, 8% in Canada, 5% in Sweden and Norway. This demonstrates a paucity of studies on this topic in low- and middle-income countries (LMICs) [45]. A significant proportion of the studies were conducted in recent years, with more than half of the studies being conducted within the last decade reflecting a heightened recognition of this issue across research and practice.

The review identified that stigma related to obesity in pregnancy is present and it can hinder the communication between healthcare providers and women. It can also be a barrier for treatment goals [46]. Faced with mixed experiences with healthcare providers, women feel uncertain of what to expect in their next consultation [25]. Questioning whether the providers are there to help or to make their health issues more unbearable by challenging their moral maternal responsibility due to their weight [25]. Our findings align with existing research indicating obstetricians as a primary source of weight stigma in maternity care with occurrences reported at a rate three and a half times higher than other healthcare professionals [47]. This underscores the need for providing training focused on effective and sensitive communication about body weight. This could significantly improve optimal care for pregnant women with obesity and more broadly for all women struggling with weight gain during pregnancy [47]. Recent obesity management guidelines and international consensus statements, highlight that addressing weight stigma is crucial for obesity prevention and treatment across all populations [48]. Healthcare professionals reported that women often respond negatively to obesity related communications which further enrich stigma. However, they believe that when women receive tailored advice, it helps alleviate the stigma associated with obesity and make them feel treated as individuals [30]. This tailored advice also ensures that healthcare providers avoid assumptions about women's diets and address stigma and provide women with more positive experiences [30]. This underscores the importance of strengthening healthcare providers confidence and ability to communicate and care pregnant women in a non-judgmental, supportive way [25].

Women of all BMI categories report weight-stigmatizing experiences from close relations including partners, family members and friends [34]. Nagpal TS et.al (2022) identified parents as a notable source of weight stigma, with a majority of stigma centered on physical appearance [34]. This aligns with 'The Tripartite Influence Model' which suggest that sociocultural factors like family, peers and media contribute to body image dissatisfaction through appearance comparisons [35]. This suggests that women of all weight categories might face weight stigma from these trusted sources [34]. Positive relationships with close people during pregnancy can promote favorable prenatal experiences and outcomes. Conversely poor-quality relationships can have a detrimental impact on prenatal well-being, potentially resulting in negative health outcomes. Awareness of the harmful effects of stigma is necessary to prevent close others from making remarks that could result in increasing the risk of depression/ anxiety [49]. The effects of maternal stress can be reduced through social support during pregnancy, so for optimal health and well-being, addressing weight stigma is essential [34].Health professionals play a crucial role in advising family members to avoid negative attitudes

towards gestational weight gain, thereby reducing body image dissatisfaction among pregnant women [35].

The analysis of 18 studies in the theme on women's experience with other members of the society highlights how social stigma surrounding pregnancy weight gain is affecting pregnant women across different cultural and socioeconomic backgrounds. Pregnant individuals from a variety of geographical contexts ranging from high-income countries like the USA and UK to places such as Ghana, Turkey, and China have notably shared experiences of stigma linked to societal disapproval of body size. Many women experienced social stigma through negative remarks and assumptions about their eating habits [37] highlighting the widespread nature of this issue. In western society overweight women face discrimination that harms body image and restricts social participation [38]. The social stigmatization itself has been shown to lead to a range of poor health outcomes like increasing vulnerability to depression and poor body image [38]. The perception that pregnancy excuses weight gain, while fatness remains socially unacceptable, highlights a damaging inconsistency. Despite the biological changes during pregnancy, societal expectations for bodily control continue to persist [34]. Individuals whose body aligns with societal ideals of attractiveness are often rewarded with social capital such as popularity, where as those who deviate from these norms frequently face disparagement and stigma [50].These constructs were largely based on internal characteristics, aligning with existing research that suggests society tends to view weight-related issues as personal shortcomings [28]. Prioritizing compassion and social justice over blame and shame will empower new mothers, ensuring they feel confident and supported, which is essential for building a healthy society [38].

Media portrayals of pregnancy tend to promote body ideals that exclude individuals with larger bodies [26]. These representations often focusing on smaller pregnant individuals with a pronounced abdomen engaging in healthy eating and activity behaviors [26]. One of the studies result, showed that weight stigmatization, from the media, is perceived not only by overweight or obese women but also by all pre-pregnancy BMI women, who discussed the media as a source of weight stigma [41]. Women reported that the stigma often pressurizes them to limit weight gain and to bounce back to pre-pregnancy state quickly driven by the unrealistic expectations set by media portrayals [41]. The limited body diversity in perinatal media representation has been identified as a barrier that discourages individuals from engaging in healthy behaviors, such as physical activity [26]. The findings suggest that media platforms could play a role in reducing weight stigma by updating their community guidelines and presenting a more inclusive range of body types especially in pregnancy context [41].

The experiences of stigma can be extremely devaluing of the pregnant woman with wide ranging consequences for her health and wellbeing as well as that of her unborn child [48]. Family, friends and healthcare providers can be trained to accept women of all body sizes by reconditioning societal norms, reshaping the common weight related messages to more neutral and positive perspectives thereby shifting the beliefs about obesity. This can avoid direct stigmatization of women during pregnancy and postpartum [8]. To address the frequent occurrence of weight stigma in society, public awareness campaigns can highlight its harmful effects to increase the sensitivity at a boarder societal level [8].

The review sheds light on how different people like healthcare providers, family members, society in general, and even the media view weight gain during pregnancy as well as women's perceptions and experiences of stigma related to it. Stangl AL et. al (2019) introduced a 'Health Stigma and Discrimination Framework', as a global, cross cutting framework that can inform research and the development of interventions and policies on health-related stigma [51]. This framework is applicable across various health conditions and it outlines how the stigmatization process pans out in the socio-ecological context of any health-related stigma. There are a series of 'constituent domains' in the framework. These include drivers (e.g., stereotypes), facilitators (e.g., cultural norms), stigma marking, manifestations (as in stigmatizing experiences and practices). These result in outcomes in the affected populations, organizations and institutions, thereby impacting population health and society. Our review upholds the relevance of the 'Health Stigma and Discrimination Framework'. The four themes of the review highlight how perceptions and experiences of weight related stigma during pregnancy is driven by notions of ideal weight gain held by different people in society.

This review also highlights the need for more diverse voices in this area of research. Many countries and communities are not represented in the current body of literature on the topic. The cultural beliefs, practices and values surrounding pregnancy and weight gain can vary significantly across ethnic groups. These differences can shape women's perceptions and experiences in the given cultural contexts including interactions with healthcare professionals and media portrayals.

Strengths and limitations

There are several strengths of this scoping review. This review is based on defined methodology and the screening of the articles was done without any time limitation. Thirty years of studies were included which captures a wide range of literature, thereby signifying the ongoing relevance of the topic. Only peer reviewed journals are included in this scoping review.

There are certain limitations to this scoping review. Only English language articles were included, which can be limiting since we do not know the information that exists on the topic in other languages. The choice of two databases (PubMed and Google Scholar) may have yielded fewer studies than what would be expected if more databases had been searched.

Conclusion

This scoping review mapped the perceptions and experiences of weight gain related stigma among pregnant women. Healthcare providers, family, friends, society at large, and the media can perpetuate it. Such stigma can exacerbate stress, as well as lead to avoidance of vital medical care, affecting both maternal and fetal health. The paucity of studies on weight related stigma during pregnancy in developing countries and across cultural contexts is highlighted.

Supplementary Information

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Supplementary Material 1.

Supplementary Material 2.

Supplementary Material 3.

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Authors' contributions

Conceptualization: M.M, H.S and A.B.; Methodology: M.M, H.S and A.B.; Software: H.S and A.B.; Validation: M.M, H.S and A.B; Formal Analysis: H.S and A.B.; Investigation: H.S and A.B; Resources: H.S.; Data Curation: H.S and A.B.; Writing—Original draft preparation: H.S and A.B.; Writing—Review and Editing: M.M.; Visualization: M.M, H.S and A.B.; Supervision: M.M.; Project Administration: M.M.;. All authors have read and agreed to the published version of the manuscript.

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Data availability

The data that supports this study are available upon request from the corresponding author.

Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

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Competing interests

The authors declare no competing interests.

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References

1. Reichetzeder C. Overweight and obesity in pregnancy: their impact on epigenetics. European J Clin Nutr. 2021;75(12):1710–22. https://doi.org/10.1038/s41430-021-00905-6.
2. Poston L, Caleyachetty R, Cnattingius S, Corvalán C, Uauy R, Herring S, et al. Preconceptional and maternal obesity: epidemiology and health consequences. Lancet Diabetes Endocrinol. 2016;4(12):1025–36. https://doi.org/10.1016/S2213-8587(16)30217-0.
3. ACOG. Weight Gain During Pregnancy. www.acog.org. 2020. Available from: https://www.acog.org/clinical/clinical-guidance/committeeopinion/articles/2013/01/weight-gain-during-pregnancy.
4. Vanstone M, Kandasamy S, Giacomini M, DeJean D, McDonald SD. Pregnant women's perceptions of gestational weight gain: a systematic review and meta-synthesis of qualitative research. Maternal Child Nutr. 2016;13(4):e12374. https://doi.org/10.1111/mcn.12374.
5. Sharp M, Ward LG, Solar C, Shea C, Carels RA, Dolbier C. Internalized weight bias, weight-related experiences, and peripartum weight. J Midwifery Women's Health. 2023;68(4):490–8. https://doi.org/10.1111/jmwh.13480.
6. Lindhardt CL, Rubak S, Mogensen O, Lamont RF, Joergensen JS. The experience of pregnant women with a body mass index >30 kg/m2of their encounters with healthcare professionals. Acta Obstet et Gynecolog Scandinavica. 2013;92(9):1101–7. https://doi.org/10.1111/aogs.12186.
7. Heslehurst N, Evans EH, Incollingo Rodriguez AC, Nagpal TS, Visram S. Newspaper media framing of obesity during pregnancy in the UK: a review and framework synthesis. Obes Rev. 2022;23(12):e13511. https://doi.org/10.1111/obr.13511.
8. Incollingo Rodriguez AC, DunkelSchetter C, Brewis A, Tomiyama AJ. The psychological burden of baby weight: Pregnancy, weight stigma, and maternal health. Soc Sci Med. 2019;235:112401. https://doi.org/10.1016/j.socscimed.2019.112401.
9. Cahill N. Respectful care for pregnant people living with obesity. CMAJ Canadian Med Assoc J. 2024;196(8):E266–7. https://doi.org/10.1503/cmaj.240244.
10. Incollingo Rodriguez AC, Dunkel Schetter C, Tomiyama AJ. Weight stigma among pregnant and postpartum women: A new context of stigmatization. Stigma and Health. 2019. https://doi.org/10.1037/sah0000191.
11. Mulherin K, Miller YD, Barlow FK, Diedrichs PC, Thompson R. Weight stigma in maternity care: women's experiences and care providers' attitudes. BMC Pregnancy Childbirth. 2013;13(1):19. https://doi.org/10.1186/1471-2393-13-19.
12. Incollingo Rodriguez AC, Tomiyama AJ, Guardino CM, Dunkel SC. Association of weight discrimination during pregnancy and postpartum with maternal postpartum health. Health Psychol. 2019;38(3):226–37. https://doi.org/10.1037/hea0000711.
13. Incollingo Rodriguez AC, Smieszek SM, Nippert KE, Tomiyama AJ. Pregnant and postpartum women's experiences of weight stigma in healthcare. BMC Pregnancy Childbirth. 2020;20(1):499. https://doi.org/10.1186/s12884-020-03202-5.
14. Daudt HM, van Mossel C, Scott SJ. Enhancing the scoping study methodology: a large, inter-professional team's experience with Arksey and O'Malley's framework. BMC Med Res Methodol. 2013;13(1):48. https://doi.org/10.1186/1471-2288-13-48.

15. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. Int J Soc Res Methodol. 2005;8(1):19–32. https://doi.org/10.1080/1364557032000119616.
16. Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology. Implement Sci. 2010;5(1):1–9. https://doi.org/10.1186/1748-5908-5-69.
17. Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): checklist and explanation. Annals of Internal Medicine [Internet]. 2018;169(7):467–73. https://doi.org/10.7326/M18-0850.
18. Joshi A, Kaur M, Kaur R, Grover A, Nash D, El-Mohandes A. Predictors of COVID-19 vaccine acceptance, intention, and hesitancy: a scoping review. Front Public Health. 2021;13:9. https://doi.org/10.3389/fpubh.2021.698111.
19. Peters MD, Godfrey C, McInerney P, Munn Z, Tricco AC, Khalil H. Scoping reviews. JBI eBooks. 2024 Jan 1; Available from: https://jbi-global-wiki.refined.site/space/MANUAL/355862497/10.+Scoping+reviews.
20. Teo Y, Ling M, Ht M. A Systematic Review on the Sufficiency of PubMed and Google Scholar for Biosciences. Acta Scientific MEDICAL SCIENCES. 2020;4(12):2582–0931. Available from: https://actascientific.com/ASMS/pdf/ASMS-04-0786.pdf.
21. Taylor J, Pagliari C. Comprehensive scoping review of health research using social media data. BMJ Open. 2018;8(12): e022931. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC6303712/.
22. United Nations. Country Classification Data sources, Country Classifications and Aggregation Methodology Data Sources. United Nations; 2014 p. 143–50. Available from: https://www.un.org/en/development/desa/policy/wesp/wesp_current/2014wesp_country_classification.pdf.
23. Bjørsmo EH, Sandsæter HL, Horn J. Knowledge, experiences and attitudes of midwives in maternity care in encounters with pregnant women with obesity - are adverse childhood experiences understood and explored as a contributing factor? Midwifery. 2022:114:103461. Available from: https://www.sciencedirect.com/science/article/pii/S0266613822002121?via%3Dihub.
24. Nyman VMK, Prebensen ÅK, Flensner GEM. Obese women's experiences of encounters with midwives and physicians during pregnancy and childbirth. Midwifery. 2010;26(4):424–9. Available from: https://www.sciencedirect.com/science/article/abs/pii/S0266613808001010?via%3Dihub.
25. Jensen SD, Andreassen P, Knorr S, Rasmussen L, Ovesen P, Kampmann U, et al. Ambivalence and moral dilemmas in women's lived experiences of obesity and pregnancy: qualitative insights for maternal lifestyle interventions. Scandinavian J Caring Sci. 2021;36(2):416–25. https://doi.org/10.1111/scs.13052.
26. Nagpal TS, Salas XR, Vallis M, Piccinini-Vallis H, Alberga AS, Bell RC, et al. Exploring weight bias internalization in pregnancy. BMC Preg Childbirth. 2022;22(1):605. https://doi.org/10.1186/s12884-022-04940-4.
27. Dieterich R, Chang J, Danford C, Scott PW, Wend C, Demirci J. She, "didn't see my weight; she saw me, a mom who needed help breastfeeding": perceptions of perinatal weight stigma and its relationship with breastfeeding experiences. J Health Psychol. 2021;27(5):135910532098832. https://doi.org/10.1177/1359105320988325.
28. Hodgkinson EL, Smith DM, Hare DJ, Wittkowski A. The construal of midwives by pregnant women with a body mass index greater than or equal to 30 kg/m2(BMI ≥ 30 kg/m2): a repertory grid study. Clin Psychol Psychother. 2016;24(2):392–400. https://doi.org/10.1002/cpp.2009.
29. Henning Cruickshank A, Lilley TS, Radcliffe B, Nosa V, Fenwick J. Māori and Pasifika perceptions of their local maternity care in Logan, Australia. Women Birth. 2019;32(3):e359–65. https://doi.org/10.1016/j.wombi.2018.08.164.
30. Heslehurst N, Dinsdale S, Brandon H, Johnston C, Summerbell C, Rankin J. Lived experiences of routine antenatal dietetic services among women with obesity: a qualitative phenomenological study. Midwifery. 2017;49:47–53. https://doi.org/10.1016/j.midw.2016.11.001.
31. Goldstein RF, Walker RE, Teede HJ, Harrison CL, Boyle JA. The healthy pregnancy service to optimise excess gestational weight gain for women with obesity: a qualitative study of health professionals' perspectives. J Clin Med. 2020;9(12):4073. https://doi.org/10.3390/jcm9124073.
32. Christenson A, Torgerson J, Hemmingsson E. Attitudes and beliefs in Swedish midwives and obstetricians towards obesity and gestational weight management. BMC Pregnancy and Childbirth. 2020;20(1). Available from: https://bmcpregnancychildbirth.biomedcentral.com/articles/https://doi.org/10.1186/s12884-020-03438-1.
33. Schmied VA, Duff M, Dahlen HG, Mills AE, Kolt GS. "Not waving but drowning": a study of the experiences and concerns of midwives and other health professionals caring for obese childbearing women. Midwifery. 2011;27(4):424–30. https://doi.org/10.1016/j.midw.2010.02.010.
34. Nagpal TS, Nippert KE, Velletri M, Tomiyama AJ, Incollingo Rodriguez AC. Close Relationships as Sources of Pregnancy-Related Weight Stigma for Expecting and New Mothers. International Journal of Behavioral Medicine. 2022. https://doi.org/10.1007/s12529-022-10083-9.
35. Wu Y, Yu S, Dai J, Zang T, Fan X, Huang Y, et al. Predictors of body image dissatisfaction among women at different stages of pregnancy: a cross-sectional study. Midwifery. 2024;1(129):103903. https://doi.org/10.1016/j.midw.2023.103903.
36. Acheampong AK, Abukari AS. Nurses' and midwives' perspectives on how the pursuit for the "perfect" body image affects their own breastfeeding practices: a qualitative study in Ghana. International Breastfeeding Journal. 2021;16(1). Available from: https://internationalbreastfeedingjournal.biomedcentral.com/articles/https://doi.org/10.1186/s13006-021-00421-0.
37. Aryeetey RNO. Perceptions and Experiences of Overweight among Women in the Ga East District, Ghana. Frontiers in Nutrition. 2016 Jun 2;3. Available from: https://pubmed.ncbi.nlm.nih.gov/27313998/.
38. Parker G. Shamed into health? Fat pregnant women's views on obesity management strategies in maternity care. Women's Studies Journal. 2017;31:22–33. Available from: https://www.wsanz.org.nz/journal/docs/WSJNZ311Parker22-33.pdf.
39. Serçekuş P, Gökçelsbir G, Bakan G. Being overweight or obese during pregnancy: a qualitative study. J Maternal-Fetal Neonatal Med. 2021;35(25):1–6. https://doi.org/10.1080/14767058.2021.1946777.
40. Furber CM, McGowan L. A qualitative study of the experiences of women who are obese and pregnant in the UK. Midwifery. 2011;27(4):437–44. https://doi.org/10.1016/j.midw.2010.04.001.
41. Nippert KE, Tomiyama AJ, Smieszek SM, Incollingo Rodriguez AC. The media as a source of weight stigma for pregnant and postpartum women. Obesity. 2020;29(1):226–32. https://doi.org/10.1002/oby.23032.
42. Hodgkinson EL, Smith DM, Hare DJ, Wittkowski A. The Construal of Midwives by Pregnant Women with a Body Mass Index Greater Than or Equal to 30 kg/m2(BMI ≥ 30 kg/m2): A Repertory Grid Study. Clin Psychol Psychother. 2016 Mar 3;24(2):392–400. Available from: https://onlinelibrary.wiley.com/doi/https://doi.org/10.1002/cpp.2009.
43. Furness PJ, McSeveny K, Arden MA, Garland C, Dearden AM, Soltani H. Maternal obesity support services: a qualitative study of the perspectives of women and midwives. BMC Pregnancy and Childbirth. 2011;11(1). Available from: https://bmcpregnancychildbirth.biomedcentral.com/articles/https://doi.org/10.1186/1471-2393-11-69.
44. Lindhardt CL, Rubak S, Mogensen O, Lamont RF, Joergensen JS. The experience of pregnant women with a body mass index >30 kg/m2of their encounters with healthcare professionals. Acta Obstetricia et Gynecologica Scandinavica. 2013;92(9):1101–7. Available from: https://pubmed.ncbi.nlm.nih.gov/23710944/.
45. Westbury S, Oyebode O, van Rens T, Barber TM. Obesity stigma: causes, consequences, and potential solutions. Curr Obes Rep. 2023;12(1):10–23. https://doi.org/10.1007/s13679-023-00495-3.
46. McCloud MB, Barosso J. Experiences of Pregnant Women with Obesity. Nursing for Women's Health. 2021;25(3). https://doi.org/10.1016/j.nwh.2021.03.004.
47. Schwenk RA, Wyss C, Aubry EM. Experiencing weight stigma during childbirth increases the odds of cesarean birth. BMC Pregnancy and Childbirth. 2025 Feb 21;25(1). Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC11846236/#glossary1.
48. Nagpal TS, Liu RH, Myre M, Gaudet L, Cook J, da Silva DF, et al. Weight stigma and prenatal physical activity: exploring the perspectives of pregnant women living with obesity. Midwifery. 2022;104:103186. https://doi.org/10.1016/j.midw.2021.103186.
49. Nagpal TS, Incollingo AC. Prenatal weight stigma can affect relationship quality and maternal health outcomes. BMC Pregnancy and Childbirth [Internet]. 2024;24(1). Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC11488195/.
50. Greenleaf C, Petrie TA, Martin SB. Relationship of Weight-Based Teasing and Adolescents' Psychological Well-Being and Physical Health. Journal

of School Health. 2013;84(1):49–55. Available from: https://pubmed.ncbi.nlm.nih.gov/24320152/.
51. Stangl AL, Earnshaw VA, Logie CH, van Brakel W, C. Simbayi L, Barré I, et al. The Health Stigma and Discrimination Framework: a global, Crosscutting Framework to Inform research, Intervention development, and Policy on health-related Stigmas. BMC Medicine. 2019;17(1):1–13. Available from: https://bmcmedicine.biomedcentral.com/articles/https://doi.org/10.1186/s12916-019-1271-3.

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