Weight Changes and Body Image in Pregnant Women: A Challenge for Health Care Professionals

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ABSTRACT

Body changes concerns and body image dissatisfaction are common during pregnancy. We aimed to examine whether health care professionals (HCPs): (i) believe that women are concerned about body image during pregnancy; (ii) consider it important to question, support, and intervene when pregnant women express body image concerns; (iii) feel comfortable enough in their abilities to question pregnant women with concerns; and (iv) have sufficient knowledge and skills to provide adequate support. A 36-item e-survey, developed by ÉquiLibre in collaboration with an expert committee, was sent to HCPs via email. HCPs believe that some situations are associated with body image concerns: postpregnancy weight loss (74.0%), perceived changes in their appearance (65.9%), excessive weight gain (65.3%), and feeling less in control of their body (36.8%). Among 321 responders, 60% considered it important to question pregnant women's concerns. One in four (25.4%) considered themselves "totally comfortable" asking about weight and body image concerns. Our study showed that HCPs need to be better supported in developing their abilities to help weight-preoccupied pregnant women. There is an urgent need to clarify HCPs' roles and to delineate the referral process as well as to ensure staff availability, in terms of time and

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RÉSUMÉ

Examiner si les professionnels de la santé (PS): (i) considèrent que les femmes enceintes ont des préoccupations à l'égard de leur image corporelle, (ii) jugent important de les questionner et de les accompagner, (iii) se perçoivent suffisamment à l'aise pour questionner celles qui sont préoccupées et (iv) estiment avoir suffisamment de connaissances et d'habiletés pour intervenir. Un questionnaire de 36 questions, développé par l'organisme ÉquiLibre en collaboration avec un comité d'experts, a été distribué à différents PS. Les PS croient que les femmes enceintes sont plus enclines à développer une insatisfaction corporelle dans certaines situations: perte de poids post-partum (74.0%), sentiment que leur corps change (65.9%), gain de poids excessif (65.3%) et sentiment de perte de contrôle sur leur corps (36.8%). Parmi les 321 répondants, 60% trouvent important d'interroger les femmes enceintes à propos de leurs préoccupations. Uniquement 25.4% se considèrent « complétement à l'aise » de questionner leurs préoccupations. Un faible pourcentage affirme « se sentir complètement à l'aise » pour supporter les femmes préoccupées. Les PS doivent être mieux outillés pour développer leurs capacités à aider les femmes enceintes préoccupées. Des changements sont nécessaires dans la clarification des rôles, dans le processus de référencement et l'acquisition de ressources humaines.

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INTRODUCTION

Pregnancy is a crucial period in a woman's life, as it is associated with important physiological and psychological changes. Weight gain is the most apparent change that occurs during pregnancy. Women must adapt to their evolving bodies and, in response to these physiological changes, they need to adjust how they perceive themselves. Body image is a psychological representation of one's body, comprising the attitudes and self-perceptions of one's appearance developed from biological, psychological, and social influences [1]. Approximately 85% of pregnant women have concerns about their weight and diet [2]. Moreover, studies have shown that body image concerns might play a role in the etiology of symptoms of depression during and after pregnancy [3, 4].

Maternal weight gain affects both fetal and maternal outcomes [5, 6]. On the one hand, excessive gestational weight gain (GWG), which occurs in half of Canadian pregnant women,

is associated with adverse short- and long-term health outcomes such as pre-eclampsia, caesarian delivery, postpartum weight retention, and type 2 diabetes [7–9]. Excessive GWG is also associated with an increased risk of infant macrosomia and offspring obesity later in life [10]. On the other hand, insufficient GWG, which occurs in 20% of pregnancies, is associated with an increased risk of preterm delivery, low birth weight infants, and a decreased initiation of breastfeeding [5, 11–13]. Hence, only one-third of Canadian women have adequate GWG [14].

It is challenging for perinatal health care professionals (HCPs) to help women gain weight within the recommendations without creating negative and unhealthy body image concerns [4, 5]. Currently, the frequent follow-ups in developed countries represent an opportunity for HCPs to provide healthy lifestyle advice [1]. HCPs have the potential to be reliable and valuable sources of evidence-based information when counselling pregnant women about weight changes [15].

However, do they know how to address body image concerns and weight changes with pregnant women? To date, a limited number of studies have investigated this issue.

The present study aims to examine whether HCPs: (i) believe that women are concerned about body image during pregnancy; (ii) consider it important to question, support, and intervene when pregnant women express body image concerns; (iii) feel comfortable enough in their abilities to ask pregnant women about their excessive concerns; and (iv) have sufficient knowledge and skills to provide adequate support.

METHODS

Data collection

Based on the literature [15, 16] and assisted by an expert committee, ÉquiLibre developed an e-survey that was later distributed using SurveyMonkey software (SurveyMonkey®, Portland, OR, USA). ÉquiLibre is a nonprofit organization that aims to prevent and reduce weight and body image concerns with actions that encourage and facilitate the development of a positive body image and the adoption of a healthy lifestyle [17]. The participants' answers to the survey were automatically stored in the SurveyMonkey database. Two data collections were conducted and targeted: first, Quebec HCPs involved in prenatal follow-ups and, second, obstetricians. All professionals who agreed to complete the survey were eligible to participate. No exclusion criteria were applied. No ethics approval was obtained but all participants gave their informed consent at the beginning of the questionnaire to participate in the data collection.

Questionnaire

The online survey was only available in French and included a total of 36 quantitative and qualitative questions. The questionnaire, translated to English, is available in Supplementary File 1¹. It included questions about: personal beliefs about women's body image concerns during pregnancy; importance of questioning, supporting, and intervening in pregnant women with body image issues; the perception of the level of comfort in questioning those women; and the perception of the knowledge level that is needed to provide adequate support. Due to limited space, not all questions are presented in this manuscript (e.g., Q31–36); however, the main results are reported.

Data analysis

Descriptive statistics were used to characterize responses regarding the region of practice, professions, genders, and quantitative questions. Qualitative data were analyzed by creating 1–8 keywords developed from participants' answers and 1 point was allocated at each occurrence. The frequency of each keyword was used to develop distribution models. Chi-square tests were used to compare proportions of answers by the type of HCPs. Differences were considered statistically

Table 1. Participant's characteristics (n = 321).

	Mean ± SD or	
Variables	N (%)	Range
Age (y)	41.2 ± 9.8	23.0-69.0
Years of experience	16.2 ± 9.8	0-40.0
Gender		
Female	311 (97.5)	
Male	9 (2.5)	
Profession		
Nurse	133 (41.4)	
Physician	65 (20.2)	
Dietitian	58 (18.1)	
Social worker	32 (10.0)	
Other(s)	26 (8.1)	
Midwife	5 (1.6)	
Medical resident	2 (0.6)	
Work area		
Québec	42 (13.1)	
Bas-Saint-Laurent	32 (10.0)	
Montréal	32 (10.0)	
Lanaudière	31 (9.7)	
Estrie	30 (9.3)	
Outaouais	27 (8.4)	
Saguenay-Lac-Saint-Jean	25 (7.8)	
Mauricie et Centre-du-Québec	21 (6.5)	
Montérégie	20 (6.2)	
Chaudière-Appalaches	14 (4.4)	
Côte-Nord	12 (3.7)	
Laval	11 (3.4)	
Laurentides	10 (3.1)	
Nord-du-Québec	8 (2.5)	
Abitibi-Témiscamingue	5 (1.6)	
Terres-Cries-de-la-Baie-James	1 (0.3)	
Average time to complete	20.5 ± 13.5	1.3-132.4
questionnaire (minutes)		
Number of completed questions (%)	82.2 ± 0.2	15.0-100.0

significant at P < 0.05. Analyses were conducted using JMP version 13.2.1 (SAS Institute Inc., Cary, NC, USA).

RESULTS

Participant characteristics

Of the 336 HCPs initially recruited, 321 respondents completed the first 9 questions, which made them eligible for further analyses. Participants' characteristics are shown in Table 1. Almost all respondents were women (97.5%). The

Supplementary data are available with the article through the journal Web site at http://dcjournal.ca/doi/suppl/10.3148/cjdpr-2020-007.

rable 2. Health care professionals' perception of pregnant women's concerns about body image

	All (n = 288)	: 288)	Nurses (n = 126)	1 = 126)	Physicians (n = 53)	(n = 53)	Dietitians	Dietitians (n = 51)	Social workers (n = 31)	ers (n = 31)	Others (n = 27)	n = 27)	
	Sometimes	Often or	Sometimes Often or Sometimes	Often or	Sometimes Often or	Often or	Sometimes Often or	Often or	Sometimes Often or	Often or	Sometimes Often or	Often or	
	or less (%)	or less very often (%)	or less (%)	very often (%)	or less (%)	very often (%)	or less (%)	very often (%)	or less (%)	very often (%)	or less (%)	very often (%)	۵
According to your observations, to what extent do the following co	, to what exte	ent do the fo	llowing conc	ern pregnant	ncern pregnant women? (Question 15)	estion 15)							
Having excessive gestational weight gain compared with recommendations	34.7	65.3	0.94	54.0	18.9	81.1	17.7	82.4	54	45.2	22.2	77.8	<0.0001
Experiencing changes related to their appearance or their body image due to pregnancy	34.0	0.99	44.4	55.6	20.8	79.3	33.3	66.7	45.2	25.8	18.5	81.5	<0.01
Losing postpregnancy weight	26.0	74.0	27.0	73.0	34.0	0.99	19.6	80.4	32.3	67.7	11.1	88.9	0.16
Being judged by their entourage about their weight, appearance, eating habits or physical activity	69.1	30.9	78.6	21.4	56.6	43.4	74.5	25.5	54.8	46.2	55.6	44.4	<0.01
Note: Chi-square analysis was performed to assess differences.	ed to assess diff	erences.											

most common professions were nurses (41.4%), physicians (20.5%), and dietitians (18.1%); social workers (10.0%) and midwives (1.6%) were also among the respondents. HCPs' perception of pregnant women's body image concerns is presented in Table 2. They identified some situations in which they believe pregnant women are more vulnerable to body image and weight concerns, namely: (*i*) already concerned about their weight, appearance, or body image before pregnancy and (*ii*) experienced changes in their appearance (Q16).

Importance of questioning and intervening

Most participants (59.5%) considered it important to ask women about body image concerns during pregnancy (important enough: 38.5%, highly: 21.0%) (Q12). However, only 28.6% of the participants reported questioning "almost all" to "all" pregnant women about their concerns (14.1% and 14.5%, respectively) (Q17). The main reasons why they rarely question pregnant women were that: (*i*) they had higher priority topics to address (77.2%) and (*ii*) the duration of the follow-up was too short (52.7%) (Q18). When asked why they do not counsel women more often, a third of the HCPs reported that they believe they do not have sufficient knowledge (32.7%) or skills (31.5%) to do so (Q20).

Ease of HCPs to recognize and question

Few professionals (25.4%) considered themselves "totally comfortable" asking about pregnant women's concerns (Q28). Moreover, when those concerns are brought up during appointments, only 20.7% of professionals reported being the first to address it, whereas 35.9% reported that the pregnant woman identified it first (Q21).

Knowledge of HCPs

Few respondents considered themselves "totally comfortable" helping underweight (15.8%), normal weight (21.7%), or overweight/obese (14.6%) women accept their body changes (Q28). Noteworthy, 54.3% of respondents reported not being comfortable counselling women with an eating disorder (Q28). HCPs who were more comfortable asking pregnant women about their concerns felt that their interventions were more effective (P < 0.0001) (Q28-29). Almost all HCPs (95.0%) reported a lack of training on body image, weight concerns, or eating disorders (Q30), but the prevalence differed between professions (nurses: 4.0%; physicians: 2.4%; dietitians: 17.8%; social workers: 3.7% and others: 7.8%; P = 0.02). More than half of respondents (56.7%) reported referring pregnant women with weight, appearance, or body image concerns to other HCPs (Q23). The most referred professions were dietitians (81.2%), psychologists (48.7%), and social workers (29.2%) (Q24). Respondents also mentioned that the act of questioning and supporting pregnant women regarding body changes is considered a role of various HCPs rather than one specific field (Figure 1) (Q13). Finally, qualitative analyses identified 3 reasons explaining why HCPs refer

to other professionals, which were when women: (*i*) have specific health problems (22.2%); (*ii*) have weight, appearance, and/or body image concerns (19.3%); and (*iii*) seek specific healthy lifestyle advice (18.9%) (Q25).

DISCUSSION

Our results show that HCPs are aware that women may have body image and weight concerns during pregnancy. They also believe it is important to ask them about and support them with these concerns during follow-up appointments. However, many HCPs are insecure asking about pregnant women's weight and body image concerns. This discomfort was mostly observed when pregnant women had a normal prepregnancy weight. HCPs may not expect normal weight women to develop weight and body image concerns, which may explain their unease. In addition, insufficient knowledge and skills on how to provide adequate counsel was the main reason HCPs felt less comfortable assessing the problem. In support of this observation, a study from Alberta found that despite 4800 resource packages being mailed to HCPs, only 50% reported sharing some type of weight gain information resource with pregnant women [18]. Hence, other interventions are needed in this regard. Similarly, a study with 30 pregnant women and 11 prenatal HCPs observed the main obstacles were lack of time, inadequate training, and perceived sensitivity of the topics among women [19]. Lack of time during appointments may limit the support professionals can provide to a patient. However, it is crucial that professionals discuss this topic with women, considering the short- and long-term effects on both maternal and child health [10]. While a study found that HCPs considered having sufficient knowledge to inform their patients about GWG and nutrition [20], we, on the contrary, found that most HCPs considered their knowledge to be insufficient. Our survey focused on women who express excessive concerns about their body image and weight changes instead of all pregnant women,

which may explain that difference. As a result, we propose that HCPs may feel comfortable discussing weight gain with pregnant women in general but might be hesitant with women expressing concerns.

Our results suggest that most HCPs recognize the importance of asking and supporting pregnant women's concerns. Likewise, Ferraro et al. [20] found that 98.6% of respondents felt that all prenatal HCPs should provide physical activity, nutrition, and GWG information. However, Ferraro et al. [20] explained that HCPs are unaware of the profession that is best suited to articulate information about GWG. In contrast, our results show that HCPs know which professionals to refer their patients to. However, respondents also believe that asking and counselling women about these issues comes down to all HCPs rather than one specific field, which remains nebulous. Continuous training about this topic might help clarify each HCPs' role and support the development of common tools and strategies on this topic, which seems essential according to our results. Indeed, we showed that many HCPs never had specific training about weight concerns during pregnancy and are uncomfortable talking about that issue with women having excessive concerns. Of note, most of the HCPs were not comfortable counselling women with eating disorders which may cause harmful consequences since it increases the risk for adverse birth outcomes [21]. Overall, our results highlight the need to clarify HCPs' roles. Professionals that should discuss weight gain and body image during pregnancy need to be identified and the referral process needs to be better detailed.

To our knowledge, this is the first study to report the perspective of HCPs regarding prenatal follow-up of pregnant women with body image and weight change concerns. However, some limitations need to be acknowledged according to the respondents' gender and work environment. The generalizability of our results is limited since most of our respondents were women who worked in service centres

and/or in primary care. Our results were also limited to the province of Quebec. The variability of the results according to the region of work and the existing and/or available health care team should also be considered. Nevertheless, our population was representative of those who are more likely to work and interact with pregnant women; most respondents were physicians and nurses, 2 HCPs automatically involved in the standard care of pregnant women.

In conclusion, our study showed that prenatal HCPs believe their patients are prone to body image and weight changes concerns and that it is important to ask and counsel them about this during their pregnancy. Further research should focus on better ways to identify pregnant women's needs and excessive concerns. Finally, valuable and effective interventions for pregnant women with body image concerns need to be developed and validated. In response to the survey results presented from this study, webinars and a toolbox were developed for HCPs by our team and qualified professionals. Further studies need to determine whether this kind of intervention is helpful to HCPs.

RELEVANCE TO PRACTICE

Considering that most women are either below or above GWG guidelines, which can impact both the mother and her child's health, our results may help support the development of more adequate and effective interventions for HCPs to promote healthy GWG and positive body image during pregnancy independent of the pregnant women's GWG. Overall, our study showed that HCPs need to be better supported in developing their abilities to adequately help weight-preoccupied pregnant women. Furthermore, health care system modifications are needed to clarify HCPs roles, delineate referral processes, and ensure there is adequate staff and enough time available to address the needs of pregnant women during follow-up visits.

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