## **ORIGINAL SCIENTIFIC PAPER**

### **QUALITATIVE RESEARCH**

# Patients' perceptions of their general practitioner's health and weight influences their perceptions of nutrition and exercise advice received

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### **ABSTRACT**

**INTRODUCTION:** General practitioners (GPs) play an important role in the management of patients who are overweight or obese. Previous research suggests that GPs' physical characteristics may influence patients' perceptions of health care received during consultations, mediating the likelihood of patients following health advice provided by GPs. This study aimed to explore patients' perceptions of their GP's health status and its influence on patients' perceptions of healthy eating and exercise advice.

**METHODS:** An interpretive approach to phenomenology underpinned the qualitative inquiry and study design. Twenty-one participants (aged  $55.9 \pm 6.5$  years; 14 females, 7 males) who had previously received healthy eating and/or exercise advice from a GP participated in an individual semi-structured interview. A constant comparison approach to thematic analysis was conducted.

**FINDINGS:** Participants identified three key indicators of perceived health of their GP. These included the GP's physical appearance, particularly weight status; perceived absence of ill health; and disclosure of a GP's health behaviours. Participants expressed favourable perceptions of the weight status of their GP. Participants expected their GP to be a healthy role model and often, but not always, felt more confident receiving advice from a GP that they perceived as healthy.

**CONCLUSION:** The findings highlight that a GP's perceived health status influences patients' perceptions of the health advice received during consultations. These findings provide a foundation for future research that may allow GPs to modify patients' perceptions of their health status in order to facilitate behaviour change in overweight or obese patients.

KEYWORDS: Body weight; general practitioners; obesity; overweight; physicians; primary health care

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### Introduction

More than 60% of the Australian population are classified as overweight or obese.¹ Overweight and obesity pose a major risk to long-term health by increasing the risk of many lifestyle-related chronic conditions, including cardiovascular disease, Type 2 diabetes, osteoarthritis and some cancers.² The economic impact of obesity in Australia is multifaceted, including direct financial costs to the Australian health care system, family and carer costs, as well as reductions in

productivity.<sup>3</sup> The total financial cost of obesity in Australia has been estimated to be \$3.7 billion per annum.<sup>3</sup>

Health professionals are encouraged to promote healthy eating and physical activity to patients in order to reduce the incidence of overweight and obesity in Australia.<sup>4</sup> In particular, general practitioners (GPs) are well placed to promote healthy eating and physical activity to patients, with more than 86% of the population consulting

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a GP at least once per year.<sup>5</sup> Best-practice guidelines for weight management in general practice include the promotion of healthy eating and physical activity.<sup>4</sup> Patients perceive GPs to have expertise in weight management, and trust the weight management advice provided by GPs.<sup>6,7</sup> Furthermore, GPs are capable of providing brief interventions, such as promoting healthy eating guidelines and recommending strategies to reduce weight, which result in improvements in health outcomes of patients.<sup>8</sup>

Overweight and obese patients who have discussed their weight with a GP are more likely to attempt to manage their weight compared to those who have not discussed their weight with a GP. Patients who have discussed their weight with a GP are subsequently more satisfied, confident and motivated to engage in and sustain weight loss behaviours. Therefore, patients' perceptions of the advice they receive from a GP may indicate the likelihood of engaging in health promoting behaviours.

Factors that have been shown to influence patients' perceptions of their GP and the subsequent advice they receive include a GP's communication style and appearance.12-15 For example, GPs who are more emotionally expressive and authentic in their non-verbal communication practices, such as maintaining eye contact and using empathetic gestures, are viewed more favourably by patients.14,15 Furthermore, the health practices of doctors have been shown to influence the likelihood of addressing preventive health measures with patients. 16-19 For example, disclosure of a GP's own health behaviours has been shown to enhance the effectiveness of their counselling by motivating patients to consider adopting similar habits.20

Patients report greater confidence in the health advice received from non-obese GPs compared with obese GPs.<sup>13</sup> Unfortunately, this study compared patients' perceptions of advice received from only five GPs (two obese and three non-obese).<sup>13</sup> Therefore, other factors such as age and gender, which differed between the obese and non-obese GPs, may have influenced patients' perceptions of the health advice received. Further research is clearly required to better

understand the factors that influence patients' perceptions of health advice received from GPs. The use of a qualitative approach will provide insight into the complex association between patients' perceptions of their GP's health status and the perceptions of weight management advice received from GPs.

Developing an understanding of patients' perceptions of their GP's health status and exploring the subsequent influence on patients' perceptions of weight management advice is a means of building knowledge that could inform counselling practices and training of GPs, as well as the implementation of weight management interventions in primary care. This study aimed to explore the perceptions of individuals who have received weight management advice from their GP, focusing on the perceptions of their GP's health status and its influence on the perceptions of weight management advice received.

### Methods

This qualitative study utilised an interpretive approach to phenomenology to explore the perceptions of individuals who have previously received weight management advice from a GP, regarding their doctor's health status. The study was approved by the Griffith University Human Research Ethics Committee, Queensland, Australia (Ref. PBH/02/12/HREC).

### **Participants**

Potential participants were individuals who had previously received weight management advice from their GP. Weight management advice included healthy eating and/or physical activity recommendations. Convenience and snowball sampling were used to recruit participants through the Griffith University Facebook page, Twitter, as well as contacts known to the research team. Interested individuals were asked to contact the research team to provide verbal consent and arrange a telephone interview time. Participants were asked whether they knew of anyone else that may be eligible and interested in volunteering for the study, and subsequently provided information to additional potential participants.

### Data collection and interview design

Data collection comprised individual semistructured telephone interviews using openended questions to guide discussions. Table 1 outlines each interview question using an inquiry logic to ensure that each question aligns with the investigative aims of the study. The interview protocol was developed following a review of published literature and collaborative input from research team members. Questions were piloted by conducting the interview on two individuals from the potential participant pool. After each pilot interview, a consultation with the participant and research team was undertaken to ensure each question was comprehensive, understandable and appropriate for the investigative aims of the study. Data collection continued until saturation of themes occurred. This refers to the point in time when additional interviews did not produce new information or perceptions from participants. 21, 22 Interviews were an average of 20 (±6.5) minutes in length and were recorded using a digital recording device.

### Data analysis

Following each telephone interview, recordings were transcribed verbatim. Data analysis was conducted using a constant comparative approach to thematic analysis, including open and axial coding.<sup>23,24</sup> Firstly, one investigator (SF) manually coded sections of the transcripts and organised these into categories with common themes. Secondly, these themes were entered into a Microsoft Excel spreadsheet in order to link themes according to their properties and dimensions.<sup>23</sup> Post-analysis discussion and verification of themes were conducted between two investigators (SF and ML) to identify common or dissident viewpoints amongst interviewed participants. Indicative quotes from transcripts have been used to illustrate key themes identified from the data. The Body Mass Index (BMI) of participants was calculated using self-reported height and weight data collected during interviews.

### Results

Twenty-one individuals (14 female, 7 male) participated in the study. Their mean age was 55.9

### WHAT GAP THIS FILLS

**What we already know:** General practitioners (GPs) are increasingly providing weight management advice to overweight and obese patients. Patients' perceptions of the care received during consultations influences the likelihood of adopting recommendations provided by their GP.

What this study adds: This study highlights that patients' perceptions of their GP's health status influences their perceptions of the health advice received. These findings allow GPs to consider the role of their perceived health status and its effect on patient perceptions of care provided and subsequent compliance with recommendations and advice.

Table 1. Semi-structured interview questions and inquiry logic

| Interview question  | Inquiry logic   |
|---|---|
| We are interviewing individuals who have received healthy eating and/or exercise advice from their GP. Can I confirm whether you have done this? If so, can you briefly tell me about your experience of receiving this advice? | Confirm that the participant is eligible. Allow the participant to describe their experience of the general practice setting and provide an understanding of the context in which they received advice. |
| Please describe the physical appearance of the GP that provided you with the health advice.   | Determine which attributes or characteristics the participant spontaneously noticed.  |
| Please describe your GP's state of health and explain why you have come to this conclusion.   | Determine which attributes the participant noticed as indicators of their GP's health.  |
| Has your GP ever spoken about their personal health behaviours during a consultation? If so, please describe what you remember from these discussions.  | Investigate the participant's recollection of their GP previously disclosing a personal health behaviour.   |
| Please describe any other notable aspects of your consultation.   | Provides an opportunity for the participant to add any further details.   |
| What impact do you think your GP's health status and health behaviours have had on the health advice they gave you?   | Determine if the participant's perceptions of their GP's health status affected their perception of advice they received.   |
| What impact do you think your GP's weight status had on your willingness to follow the advice they gave you?  | Directly assess the impact a GP's weight status may have on a participant's perceptions of the advice they received.  |
| Considering all the points we have discussed today, can you please describe to me the importance of GPs being healthy role models.  | Provides a hypothetical scenario for participants to discuss the importance of GPs being healthy role models.   |
| Do you have anything else you would like to add regarding this topic?   | Provides an opportunity for the participant to express any further opinions they have.  |
| GP General practitioner   |   |

GP General practitioner

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(±8.7) years and mean BMI was 29.3 (±6.5) kg/m². The majority of participants (n=19) perceived their GP to be generally healthy. However, a variety of reasons were provided to justify this perception. Three common themes emerged concerning what participants perceived to be indicators of health. These were: the GP's physical appearance, particularly the GP's weight status; the absence of ill health; and personal discussions in which the GP disclosed their own personal health behaviours.

He [the GP] looks healthy, like he is not fat and seems to look a normal weight for his height. (#17; Female, 43 years, BMI 45.7 kg/m²)

Healthy, because he [the GP] hasn't indicated otherwise. (#4; Male, 63 years, BMI 28.6 kg/m²)

In conversations we've had about his [the GP's] lifestyle, how he said he goes to the gym every morning and that's his regime. (#15; Male, 56 years, BMI 22.8 kg/m²)

It was clear from these early discussions that participants had made judgments about their GP based on very little evidence, particularly regarding smoking.

Well I don't think she [the GP] would be a smoker, I'm not sure why but I just don't. I think she is too healthy. (#1; Female, 64 years, BMI 38.0 kg/m²)

I would say he [the GP] practices what he preaches, in fact these days most medicos would. (#3; Male, 75 years, BMI 24.5 kg/m²)

Participants had conflicting perceptions regarding the influence of their GP's health status on the health advice received from their GP. Participants indicated two overwhelming themes that were considered more important than the participants' perception of their GP's health status. These themes were:

- 1. The participant had a personal commitment to seek advice from a health professional; and
- 2. The participant placed higher importance on the GP's medical training and subsequent knowledge compared to the GP's health status.

Well I actually thought he [the GP] was overweight but then I thought I'm here about my own weight not his weight. So whatever advice he did give me I took it on board because I was there for myself. (#12; Female, 48 years, BMI 30.1 kg/m²)

I just took and have taken his [the GP's] word on a number of occasions as good advice from his medical background rather than what he looks like. (#3; Male, 75 years, BMI 24.5 kg/m²)

Other participants reported that their GP's health status did affect their perceptions of received health advice. Participants indicated that they had greater trust and confidence in the advice provided by their GP, because they perceived the GP to be healthy.

I suppose it's the old story of 'never trust a skinny chef', you know. If the doctor himself had been overweight I probably wouldn't have taken too much notice. (#10; Male, 45 years, BMI 25.8 kg/m²)

Participants were also divided about the effect their GP's weight status had on their willingness to follow advice. Participants were often unable to come to a definitive conclusion and instead had a tendency to refer to hypothetical scenarios.

Look it depends if he [the GP] was slightly overweight he can still be fit, strong and healthy but if he was obese it would definitely affect me. I wouldn't go back to him if he was obese. (#21; Female, 48 years, BMI 19.5 kg/m²)

If the GP was grossly overweight you would be reluctant to follow their advice because you would think 'if their advice was so good why hasn't it worked for you?' So that would make a big difference. (#13; Female, 49 years, BMI 29.8 kg/m²)

Fewer participants reported that their GP's weight status would not influence their willingness to follow advice with the themes of personal commitment and medical knowledge re-emerging.

Participants unanimously agreed that GPs should act as healthy role models. Most participants suggested they would feel more confident in the advice provided if they perceived their GP to be healthy.

If your doctor was overweight and turned to you and said you have to lose 20 kgs I don't think people would take them particularly seriously. (#6; Female, 47 years, BMI 36.3 kg/m²)

I was always confident about what he was telling me about because I could see he was in pretty good shape and he wasn't letting himself go in anyway. (#20; Female, 54 years, BMI 32.6 kg/m²)

### Discussion

The purpose of the current study was to explore patients' perceptions of their GP's health status and the influence on their perception of weight management advice received. The results suggest that patients' perceptions of the advice received are influenced by the GP's perceived health status. In addition, a GP's perceived health status is most likely to be influenced by their physical appearance and discussions relating to the GP's personal health behaviours. If a GP is perceived as healthy, the advice that patients receive is generally considered to be more credible, motivating and trustworthy. These factors may influence the likelihood that patients will adhere to recommendations provided by their GP and, as a result, potentially improve health outcomes. 25,26

The findings of this study are consistent with previous research of patients' perceptions after visiting one of five physicians (two obese and three non-obese). Patients indicated greater confidence levels when receiving weight management advice from a non-obese physician when compared to their obese counterparts. Taken together, the results of the current study and those of Hash et al. Suggest that the weight and health status of GPs have the potential to impact on patients' perceptions of the health advice received.

Unlike Hash et al.,<sup>13</sup> the current study did not assess the BMI of GPs, but rather it relied on participants' perception of their GP's weight status. Patients were unlikely to use specifically defined BMI categories when classifying their GP, as evidenced by the terminology such as 'slim' or 'slender' used to describe their GP's health status. Therefore, this study provides insight into the judgments that patients make regarding their

GP's weight and health status, rather than the effect of GP's actual weight and health status on the advice provided to patients. The prevalence of overweight and obesity among GPs is reportedly similar to that of the general population.<sup>27</sup> However, this may not be the case in this study sample. Participants generally reported that their GP was within the healthy weight range, and only two GPs (10%) were perceived as overweight. There are many possible explanations as to why participants did not identify a larger proportion of GPs as being overweight.

If a GP is perceived as healthy, the advice that patients receive is generally considered to be more credible, motivating and trustworthy. These factors may influence the likelihood that patients will adhere to recommendations provided by their GP and, as a result, potentially improve health outcomes.

Previous research has suggested that when evaluating another person's body weight, individuals tend to underestimate the weight of heavier individuals. 28,29 This inaccuracy may account for the large proportion of participants reporting their GP to be within the healthy weight range. Secondly, it has been widely reported that a person's perceived personal attractiveness influences their attractiveness rating of others.30 Key determinants of physical attractiveness include body weight and shape. 31,32 Therefore, it could be inferred that the participants' personal body weight and shape may influence their perception of the GP's weight status. Although 65% of participants in the current study were classified as overweight or obese, it is possible that participants may have incorrectly classified their GP in the healthy weight range because they perceive their GP to weigh less than themselves. Alternatively, the study may have attracted participants with strong views regarding their GP and who had purposefully consulted GPs that are within the healthy weight range. Further investigation into patients' perceptions of GPs with known weight

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and health behaviours is recommended to assess how patients' perceptions of health advice differ dependent on their GP's weight status.

Australian patients have the ability to choose their GP and change GPs at their discretion. It is reasonable to assume that patients who are dissatisfied with their GP will seek a different GP for future consultations and therefore this may contribute to patients' very positive perceptions in this study. Indeed, patients who select their own GP are more likely to report high satisfaction levels and trust in their GP.33,34 Furthermore, patients who consult the same GP regularly have higher satisfaction scores and positive attitudes towards their GP in comparison to patients who do not consult the same GP.35 Considering the majority of participants reported regularly consulting the GP discussed, it is possible that participants may have developed a relationship, and inherently trust their GP, and hence their perception may be more positive.

The personal health behaviours of GPs are likely to influence the rate of preventive health counselling and subsequent uptake of healthy behaviours by patients.

Other indicators of health that the participants described included the lack of ill health and the self-disclosure of personal health behaviours by the GP. These findings are consistent with previous research that demonstrates a relationship between doctors' personal health behaviours and the preventive health care provided to patients. <sup>17,18,20</sup> The current study indicates that these discussions, or lack thereof, were perceived by participants as an indicator of their GP's health status. These findings highlight that the disclosure of information by GPs not only acts as an indicator of health, but also influences patients' perceptions of health advice received and likelihood of adopting similar health behaviours.

Interestingly, participants made a number of inferences about their GP and their health

behaviours throughout the interviews. These comments suggest that patients may form opinions without specific evidence of what health behaviours their GP may undertake. This was particularly evident in comments about smoking, with participants suggesting that GPs are 'too healthy to be smokers.' Further research is required to investigate the influence of these judgments on their perceptions of health advice received from GPs.

Physicians believe that they should be healthy role models for their patients. 12,36,37 The current study confirms that patients also expect their GPs to be healthy role models. In the United Kingdom, the National Health Service (NHS) has suggested that, by supporting the health and wellbeing of its staff, they will act as advocates for both their patients and their own communities.<sup>38</sup> The delivery of weight management advice in a general practice consultation can encourage patients to adopt healthier behaviours and ultimately improve health outcomes, including facilitating weight loss.4 Furthermore, GPs who practise the health behaviours they advise people to do are more likely to promote these behaviours to their patients. 12,39-41 Hence, the personal health behaviours of GPs are likely to influence the rate of preventive health counselling and subsequent uptake of healthy behaviours by patients.

This study has an important limitation—that the strategy used to recruit patients may have resulted in selection bias.<sup>42</sup> It is likely that those volunteering to participate may take more interest in selecting and visiting their GP and therefore may have strong views about the health of GPs.

In conclusion, this study highlights that the patients' perceptions of their GP's health status influences their perceptions of the health advice received. These findings provide a foundation for future research that may allow GPs to modify patients' perceptions of their health status, in order to result in positive perceptions of health advice received. Further investigation is required to examine how patients' perceptions of their GP's health status influences the downstream aspects of care, including compliance, continuity of care and ultimately health outcomes.

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**COMPETING INTERESTS**None declared.