Nursing Standard

evidence & practice/research/occupational health

OBESITY

Investigating the attitudes to health of nurses who are obese

NS10645 Wills J, Kelly M (2017) Investigating the attitudes to health of nurses who are obese. Nursing Standard.

Date of submission: 3 August 2016; date of acceptance: 8 December 2017. Doi: 10.7748/ns.2017.e10645

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Conflict of interest

None

Peer review

Online

Abstract

Obesity is more prevalent among nurses than any other group of healthcare professionals, with obesity rates equivalent to those in the general population. Obesity is an issue for the nursing workforce because of its impact on work-related sickness and productivity through conditions such as arthritis and diabetes. This article investigates nurses’ attitudes to their own health and obesity, which many attribute to the effect of working practices such as shift patterns on their ability to maintain healthy diet and activity levels.

Aim To investigate the attitudes, motivations, behaviours, and service-use experiences of nurses who are obese.

Method This study recruited 196 nurses who are obese at the Royal College of Nursing (RCN) Congress in June 2016. Participants were asked to complete a short survey on their attitudes to weight and the effectiveness and availability of workplace health promotion initiatives.

Results Of those surveyed, 95% (N= 187) wanted to lose weight and 94% (N=185) thought that it was problematic for nurses to be obese, with the main reason being that obesity made it difficult to discuss weight-loss and healthy lifestyles with patients. Participants expressed an interest in work-based healthy lifestyle programmes if they were low-cost and fitted around working hours, however, a significant proportion (38.1%; N=75) reported that their workplace did not offer any programmes to improve staff health.

Conclusion Obesity is often regarded as an individual lifestyle choice, however, environmental constraints on nurses' working lives should be addressed to reduce the high levels of obesity in the workforce.

Keywords

diet, healthy lifestyles, nurses, obesity, prevention, professional responsibility, weight, working practices

The Foresight Report (Butland et al 2007) outlined that obesity is a complex issue with numerous causes, including genetic determinants and homeostatic imbalance (Martinez 2000) and an individual’s behaviour within a cultural, environmental and social framework. For example, environmental factors may shape the availability and consumption of different foods or the levels of physical activity undertaken by populations. Cultural attitudes may determine attitudes and beliefs around obesity, physical activity or diet. Working practices have been shown to influence patterns of food consumption, and family dynamics may determine the types of food eaten at home (Butland et al. 2007).

Although an individual’s weight is often regarded as a matter of personal responsibility and the popularity of weight management strategies such as commercial weight loss programmes or diet plans support the perception that it is possible for people to control their weight, the obesogenic environments in which people live and work can make a substantial contribution to the development of obesity (Butland et al 2007). Because of this, much of the policy aimed at tackling obesity outlines the necessity for high-level legislative changes, such as the Soft Drinks Industry Levy on soft drinks containing added sugars, which is due to take effect from April 2018 (Her Majesty’s Treasury 2016). Similarly, the reaction to the recent childhood obesity plan (Department of Health 2016) called for much stronger action on factors such as the levels of sugar in foods, which contribute to obesity. For example, the Royal College of Nursing (RCN) criticised the plan for failing to address the marketing of unhealthy foods targeted at children (RCN 2016). Supermarkets and the British Retail Consortium (BRC) called for mandatory targets to reduce levels of saturated fat and salt in products, a position echoed by the British Medical Association (BMA) (BRC 2016; BMA 2016)

A prevalence study of nurses in Scotland found that 69% were overweight (defined as body mass index (BMI) of 25 or above) or obese (defined as a BMI of 30 or above) (Kyle et al 2016). This was higher than other healthcare-related occupations or other occupations generally, although similar to the prevalence of obesity in the general population, where 68% of men and 58% of women are overweight or obese (NHS Digital 2017).

The obesogenic environment for nurses includes long hours, shift work, low pay and caring for others, all of which have been identified as factors that nurses feel contribute to their ill-health (Tucker et al 2012, da Costa Fernandes et al 2013, Phiri et al 2014, Almajwal 2015). Several cross-sectional studies also report significant associations between nightshifts and increased BMI in nurses (Zhao et al 2011, Marquezea et al 2012, Kim et al 2013, Smith et al 2013, Peplonska et al 2015), while Lowden et al (2010) noted that people who worked nightshifts reported taking irregular meals and having a higher animal fat, carbohydrate and protein intake, coupled with lower dietary fibre consumption and frequent snacks. Nightshift workers are also less likely to be involved in sports or recreational physical activity (Atkinson et al. 2008). NHS staff have also identified canteen opening times, lack of availability of healthy food options and a lack of breaks as barriers to healthy eating (Winston et al 2008).

At an organisational level, 38% of trusts reported that they did not offer similar healthy food options in the evenings compared with during the day, and 73% did not offer healthy food options overnight (Royal College of Physicians and Faculty of Occupational Medicine 2014). As the largest occupational group in the NHS (Health and Social Care Information Centre 2016), nurses play a pivotal role in addressing obesity by providing patients with advice and education on preventive behaviours, including the importance of maintaining a healthy diet and taking frequent exercise. Press reports have detailed how healthcare staff are not providing effective role models or credible public health messages (Crocker 2015; Patterson 2014; Blake 2014), and while there is recognition that healthcare roles are demanding and may contribute to ill-health, nurses also have to meet their professional responsibilities under The Code (Nursing and Midwifery Council 2015) and engage in health promotion activity with patients.

The National Institute for Health and Care Excellence (NICE) recommended that, as an employer, the NHS should set an example in developing policies to prevent and manage obesity, including among the organisation’s staff (NICE 2006). NICE has produced three sets of guidance relevant to tackling obesity in the workplace, which focus on obesity prevention (NICE 2015), physical activity in the workplace (NICE 2008a); and the ways in which environmental and building design should promote physical activity (NICE 2008b). However, implementation and audit data suggests that NHS trusts find it difficult to address obesity, with only 28% of trusts having an obesity strategy or policy in place (Royal College of Physicians and Faculty of Occupational Medicine 2014). However, addressing obesity in the nursing workforce is a priority considering the ageing nursing workforce, challenges to recruitment and retention, increasing workload and stress levels, and poor morale (Royal College of Nursing 2015).

It is important to explore the views of nurses who are obese to understand any barriers that prevent them from choosing to lead healthier lifestyles, as well as the factors that could motivate them to do so. Evidence on the motivation for change among people with obesity is limited and often originates from studies into patients with obesity or participants in commercial weight loss programmes (e.g. Stubbs et al. 2015; Madigan et al. 2014). It is also not known whether nurses differ from the general population in their perceived needs for weight loss interventions. For example, nurses may require healthier foods in the workplace or exercise classes timed around shift patterns.

Aims

To investigate the attitudes, motivations, behaviours and service-use experiences of nurses who are obese. The study aims to understand the explanations that nurses have for their own obesity and the extent to which these may predict their motivation to achieve a healthy weight.

Method

The study took place at the Royal College of Nursing Congress in Glasgow in June 2016. All of the 196 participants were registered nurses working in England; those working in the other countries of the UK were not eligible to participate as the survey is part of a larger project working with nurses in England only. Participants were recruited from a stand in the main conference hall based on a visual identification of obesity, aided by a validated visual rating scale (Harris et al 2008), with verification between two researchers where possible. Based on this visual identification, potential participants were asked if they had ever worn clothes sized XXL or 18 and above. The participants also took part in a short electronic survey hosted on a tablet. As well as being asked to describe their health and weight, and how these compared to other nurses they worked with, participants were asked:

* If they had ever been advised to change any aspect of their lifestyle?
* Whether they wanted to reduce their weight and if so, why?
* If they had made any previous attempts to lose weight?
* Whether they could identify any activities or offers provided in their workplace that aimed to support a healthy lifestyle?
* If they had taken up any of these offers, and if so, why?
* What changes in their workplace would help them maintain a healthy lifestyle?

Following the tablet survey, participants were asked two open-ended questions:

* What term they preferred when discussing their weight.
* What did they believe to be the most important reason for almost 70% of nurses being overweight or obese.

Recruitment continued over the four days of the conference and participants were provided with an information sheet and informed that commencing the survey would also indicate their consent for data to be used. To encourage their participation in a potentially sensitive discussion about weight, they were entered into a draw to win a tablet device.

Ethical issues

Ethical approval for the study was granted by London South Bank University Ethics Committee in June 2016 (UREC 1616). Participants were given a study information sheet and informed that they were free to refuse to participate or to withdraw from the survey at any time. Participants gave oral consent before completing the survey. All survey data were anonymised at the analysis stage.

Results

The survey was completed by 196 participants, of whom 82% (N=161) were female. The greatest proportion of participants was aged 51 to 60 years (N=71; 36%), reflecting the ageing nursing workforce (RCN 2015), and the majority were either band 5 (32%) or band 6 nurses (N=57; 29%) while 16% (N=31) reported that they worked in other fields, including nursing research and education. The majority worked in hospital settings (54%; N= 106), while 27% (N= 53) [Q. worked in the community.

Of the participants, 93% (N= 182) reported that they were overweight for their height. Nevertheless 47% (N= 92) of all participants reported their health as ‘very good’ or ‘good’. Participants’ self-reported weight ranged from 61kg (9st 8lbs) (this participant had lost 34kg and those who had previously been obese were also eligible to participate) to 235kg (37st). Most participants (84%; N= 165) were aware that there are high levels of people with obesity among the nursing workforce and 45% (N= 88) regarded themselves as being of a similar weight to their colleagues.

The numbers of participants who were motivated to lose weight was high, with 95% (N= 186) reporting that they would like to lose weight. A further 96% (N= 188) reported that they had tried to lose weight previously, while 45% (N= 88) could be termed as ‘weight cyclers’, or participants who reported that they had frequently tried to lose weight; of these, 67% (N= 131) [had been successful at losing weight in the past. When asked how they had lost weight, 65% (N= 127) reported that they had tried to eat more healthily, while 61% (N= 120) had tried to reduce the amount that they ate. Almost half (49%; N= 196) had previously attended a weight management organisation such as Slimming World and a similar proportion (48%; N= 94) had tried a range of diets.

All those attending the stand (including the survey participants) were invited to indicate their preferred term for describing obesity on a chart within the stand. Responses were collected from 100 participants with the term ‘overweight’ preferred by 38% (N= 38) followed by ‘obese’ (28%; N= 28); only 8% (N= 8) preferred the term ‘fat’ (Figure 1).

Figure 1. Preferred terms for obesity

Participants were also asked what in their opinion accounted for the high levels of obesity among the nursing workforce (Table 1).

Table 1. Nurse attitudes on the levels of obesity in the nursing workforce

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| --- | --- | --- |
| Theme | Indicative Comments | Number of participants giving each reason |
| Work organisation | ‘Lack of breaks or short breaks make it difficult to eat healthily’‘The work is more sedentary with the amount of paperwork’‘Shift work makes it harder to eat regularly and healthily’ | 46959 |
| Environmental factors | ‘Chocolates, cakes and biscuits are given as gifts, brought in for meetings and are on sale in the hospital shops and so are always available’‘The canteen makes it difficult – as in a lack of healthy choices, too expensive – to eat healthily and is not open at night or weekends for healthier food’ | 2515 |
| Nursing (emotional labour) | ‘Nursing is draining and stressful and self-care is not a priority, so nurses resort to “comfort eating”’ | 21 |
| Nursing (social norms) | ‘Most nurses are overweight so nurses think this is “normal”’ | 3 |
| Individual responsibility | ‘It’s not the job itself, it’s individuals’ own lifestyle choices’ | 18 |

The majority of participants (94%; N= 184) thought that it was problematic for nurses to be obese. The main reason provided by 144 participantswas that being obese made it challenging for nurses to carry out their professional duties (36%; N=52), a similar proportion of participants (28%; N=41) stated that being obese made it harder to have conversations with patients about their weight and the requirement to act as healthy role models. The least important reason **given by** 137 participants was that high levels of obesity reflected negatively on the nursing profession (15%; N=21).

The most common reason given by participants for wanting to lose weight was to improve their health (77%; N= 151) the least common reason was to make it easier perform their role as a nurse (25%; N= 49), although 47% (N= 92) did state that their weight made it difficult to bend down or engage in manual-handling practices.

Just over one-third of participants (34%; N= 67) had experienced their weight being mentioned by a patient, while one-quarter (25%; N= 49) said that their weight made them embarrassed to talk to patients about weight issues and 30% (N= 59) reported that their weight made them less likely to raise the topic with patients. Conversely, one-third of participants (33%; N= 65) regarded their weight as having had a positive effect on their practice, making it easier to talk to patients about their weight and develop a rapport.

A large proportion of participants (38%; N= 75) reported that their workplace did not offer any programmes to improve staff health. Where organisations did offer health programmes, the most commonly taken up were health checks (30%; N= 59) [and healthier food options (27%; N= 53)]. The reasons that made nurses most likely to take up a workplace activity to improve their health were that it fitted around working hours (46%; N= 90) and was free (41%; N= 80). Barriers to nurses taking up a workplace health activity included lack of knowledge about any offers (33%; N= 65) and not having enough time (26%; N= 51).

Discussion

Obesity can be a sensitive issue that people may be reluctant to discuss through embarrassment, fear of causing offence or being seen as discriminatory (Puhl & Heuer 2010; Nolan et al. 2012; Blackburn et al. 2015), However, the participants in this study were not sensitive about discussing their weight as evidenced by their willingness to complete the survey and preferred the terms ‘overweight’ or ‘obese’ when discussing the issue, which many patients and members of the general public may regard as pejorative and having negative connotations (Tailor and Ogden 2009, Volger et al 2012).

Obesity is seen by policymakers as an issue for the nursing workforce because of its impact on work-related sickness and productivity through related conditions such as arthritis and diabetes (Boorman 2010). Many of nurse participants in this study were aware of the prevalence of obesity and of the necessity of addressing it because it affects their ability to do the job and because being obese affects the willingness of nurses to deliver public health messages, as well as affecting the credibility of those messages (Kelly et al. 2017)

The majority (N= 181; 92%) of participants reported that they weighed the same or more than their colleagues and further research is required to understand how social networks and norms in the workplace may affect not only the prevalence of obesity (Christakis and Fowler 2013), but also nurses’ motivation to manage their weight**.** People who are socially connected to each other tend to be similar in their weight status or risk of developing obesity and having social connections who are obese may predict obesity over time as individuals tend to mirror the behaviour of significant others within their social network (Powell et al. 2015; Pachucki & Goodman 2015).Using the social networks of likely ‘influencers’ or dominant individuals within nurses’ peer groups, or designing interventions that acknowledge social capital and workplace norms, may be effective in halting the increasing prevalence of obesity among nurses (Kyle et al. 2016, Kyle et al 2017). For example, many nurses work in teams, and there is some evidence that team-based interventions have a beneficial effect on weight loss (e.g. Leahey et al. 2012; Morton et al. 2011).

In common with existing evidence (e.g. Marquezea et al. 2012; Kim et al. 2013; Friis et al. 2008) the majority of participants in this study attributed high levels of obesity among nurses to working practices. In particular, participants noted the impact of shift work on eating patterns and the lack of, or length of, breaks, which meant that eating ‘snacks’ was more convenient than eating meals. Obesity is a result of eating more calories than the body needs and this is commonly described by policymakers as the result of unhealthy lifestyle choices. Interventions thus tend to focus on support for behaviour change [and motivational interventions such as free exercise classes. However, this study demonstrates that the participants often externalised the reasons for their obesity, focusing on working practices and their environment, rather than their own behaviour. [If the high levels of obesity in the workforce are to be reduced, the working practices that prevent nurses from leading healthier lives need to be addressed (Pearl and Lebowitz 2014); for example the relationship between obesity and stressors such as the emotional labour of nursing is well-established but not acknowledged in weight management interventions for nurses (Torres and Nowson 2007).

The motivation to lose weight was higher in these nurse participants than in a survey conducted with members of the general public (Wills et al 2015). Their reasons for wanting to lose weight were mostly personal, including wanting to improve their health, and to look or feel fitter. Although the majority of participants did not recognise maintenance of a healthy weight as part of their professional duty or fitness to practise, they did recognise the impact that excess weight had on their ability to work effectively. One-third of participants reported that their weight made it challenging to perform manual tasks such as lifting or moving patients and also recognised that being obese affected their relationship with patients, patients’ confidence in them, and the credibility of any public health message they might deliver. There have been calls for regulatory bodies to appeal to nurses’ professional duty as an approach that could be used to motivate nurses (Orr et al. 2014; While 2014) to maintain a healthy weight and there is widespread acceptance that nurses should act as role models and ‘practise what they preach’ (Kelly et al. 2017). This study has demonstrated, however, that nurses are, like the general population, mainly motivated by health and fitness.

This survey is one of several insight-gathering activities undertaken as part of the Healthy Weight Initiative for Nurses (Win.), a project led by London South Bank University and C3 Collaborating for Health that aims to increase understanding amongst nurses and employers about the high prevalence of obesity among nurses. The project uses a combination of co-production, evidence and design to find out what might work best to support nurses to maintain a healthy weight. The co-design process has included a series of workshops with nurses facilitated by Uscreates, a design organisation for health and wellbeing settings. The interventions are designed in collaboration with nurses to ensure that they not only address the needs that nurses identify for support that fits into their working lives but also are practical and useful.

Strengths and Limitations

To our knowledge this is the first paper of its kind that explores the views of nurses who are obese and provides insight into whether obesity is seen by nurses as warranting attention. By using visibility to identify participants, the authors could identify potential participants quickly, and were able to capture the views of a wider range of participants than if other recruitment methods had been used.

Using a relatively small sample of nurses working in England and attending Congress, the findings are limited in their generalisability although based on the demographic details collected and published statistics on the nursing workforce (e.g. NHS Digital 2016), participants reflected the gender, age and socioeconomic status of the nursing workforce, which suggests that no recruitment bias was evident. The research team did not experience the anticipated challenge of potential participants taking offence to being recruited after being visually identified as obese.. It was not however, possible to calculate a response rate for the survey as no details of individuals who were approached and either declined to participate or did not meet the survey criteria of working in England were recorded. A potential for bias may have been introduced by the researchers passing by eligible, but "undesirable", respondents (Miller et al. 1997). Individual self-reported responses to the survey questions may have been subject to social desirability bias.

Conclusion

Obesity rates are higher among nurses than other healthcare professionals and similar to that of the general population (Kyle et al 2016, Kyle et al 2017). According to participants in this study, the high prevalence of obesity among nurses can be attributed to the impact of working practices such as shift patterns and the unavailability of exercise facilities, on exercise and diet. If healthcare organisations are to succeed in reducing obesity levels among nurses, they must address the impact of the workplace environment on nurses’ health behaviours and ability to lead healthy lifestyles. This study has demonstrated that nurses are motivated to maintain a healthy weight, not only for their own health and fitness, but also because they recognise that their own health status affects their credibility with patients.

Acknowledgement

This study took place as part of the Healthy Weight Initiative for Nurses (Win.) project which is led by C3 Collaborating for Health in partnership with London South Bank University and funded by the Burdett Trust for Nursing, the RCN and RCN Foundation.

Implications for practice:

* Social norms among colleagues play an important role in the maintenance of unhealthy lifestyles among nurses.
* Any weight management interventions for nurses such as flexible exercise classes and healthy eating options should be designed around factors such as shift patterns that affect nurses’ ability to lead healthy lifestyles.

Nurses recognise that their own weight affects their professional practice.

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