Contents lists available at ScienceDirect



Review





journal homepage: www.elsevier.com/nedt

# Early training in tackling patient obesity: A systematic review of nurse education



### A. Fillingham <sup>a,\*</sup>, S. Peters <sup>a,1</sup>, A. Chisholm <sup>a,2</sup>, J. Hart <sup>b,3</sup>

<sup>a</sup> Department of Psychology, University of Manchester, Manchester, UK

<sup>b</sup> Medical School, University of Manchester, Manchester, UK

#### ARTICLE INFO

Article history: Accepted 18 June 2013

Keywords: Behaviour change Obesity Undergraduate nurses Education Interventions Systematic review

#### SUMMARY

*Objectives:* This systematic review aims to identify studies that have assessed educational interventions in undergraduate nurse training regarding obesity, and to investigate the interventions' effectiveness. *Background:* Obesity is a prominent global issue and nurses have an increased role in weight management with patients. The literature has identified various theory-based behaviour change techniques that successfully assist weight management in patients. Thus, training nurses in obesity-related behaviour change techniques is appropriate in preparing them for their future professional role. However, effectiveness of these educational interventions has not yet been assessed.

Methods: The Centre for Reviews and Dissemination guidelines informed this systematic review. Four databases were systematically searched and articles were assessed against inclusion criteria. Data extraction and quality appraisal forms were developed and completed to identify salient features within the articles. *Results:* Eight studies met inclusion criteria. Only two included both baseline and outcome measures, one of which was a randomised controlled trial. Additionally, only one study included an explicitly identified behaviour change technique. Interventions were delivered through a range of methods, however, quality appraisal indicated that all of the studies had poor methodologies and had high risks of bias.

*Conclusions:* Studies in this area of research are sparse and are not methodologically robust. Therefore, it is not possible to identify effective educational interventions for nursing students on weight management.

*Implications:* More robust research is needed to investigate how nurses can be trained to facilitate weight management. Greater transparency of intervention descriptions, particularly around what behaviour change techniques were taught, would allow for replication and appropriate evaluation. Until then, it is not known if current teaching adequately equips nurses to manage obese and overweight patients.

© 2013 Elsevier Ltd. All rights reserved.

#### Introduction

Overweight and obesity are included as leading risks for global deaths (The World Health Organisation; WHO, 2011) and 502 million adults are reported to be obese across 199 countries (Finucane et al., 2011). Overweight and obesity have increased in recent decades in various populations including the USA, the UK, China and Japan (Ogden et al., 2004; Rennie and Jebbs, 2005; Wang et al., 2007; Yoshiike et al., 2002). Obesity causes around three million deaths per year worldwide

E-mail addresses: ashley.fillingham@hotmail.co.uk (A. Fillingham),

(Prospective Studies Collaboration, 2009) and is accountable for a range of comorbid disorders including type 2 diabetes, cardiovascular disease and many cancers (Guh et al., 2009). Additionally, obesity-related illness has direct and indirect costs to the economy (Wang et al., 2011), with obese individuals having additional conditions associated with obesity that lead to 30% higher medical costs compared with their normal weight peers (Withrow and Alter, 2011).

The need to tackle obesity actively is reflected by recommendations from the National Institute for Health and Clinical Excellence (National Institute for Health and Excellence, 2006) that require health professionals to be trained to provide support and advice to people around weight management. However, research reveals that health professionals perceive many barriers to fulfilling this role successfully. Barriers include uncertainty about their role, not having faith in existing treatment options (Epstein and Ogden, 2005), and low personal selfefficacy and abilities in obesity management (Perrin et al., 2005). Health professionals report avoiding behaviour change talk during consultations due to a feeling of being inadequately trained and fearful of damaging relationships (Chisholm et al., 2012a; Keyworth et al., 2012).

<sup>\*</sup> Corresponding author at: Coupland Building 1, School of Psychological Sciences, Oxford Road, Manchester, M13 9PL, UK. Tel.: +44 1942 201991.

Sarah.Peters@manchester.ac.uk (S. Peters), Anna.Chisholm@manchester.ac.uk (A. Chisholm), Jo.Hart@manchester.ac.uk (J. Hart).

<sup>&</sup>lt;sup>1</sup> School of Psychological Sciences, Coupland Building, M13 9PL, UK. Tel.: +44 161 2752558.

<sup>&</sup>lt;sup>2</sup> Coupland Building 1, School of Psychological Sciences, Oxford Road, Manchester, M13 9PL, UK. Tel.: +44 161 3061751.

<sup>&</sup>lt;sup>3</sup> Medical School, Stopford Building, M13 9P7, UK. Tel.: +44 161 2758145.

<sup>0260-6917/\$ –</sup> see front matter © 2013 Elsevier Ltd. All rights reserved. http://dx.doi.org/10.1016/j.nedt.2013.06.020

Nurses in particular have an increasing role in providing lifestyle interventions to support weight management (Department of Health, 2006) and graduate nurses are expected to be able to use behaviour change techniques (BCTs) to promote health in patients (American Association of Colleges of Nursing, 2008). Project 2000 was implemented in the early 90s and initiated the importance of coursebased learning and linking theory with practice within nursing education (Crotty, 1993; UKCC, 1986). Rather than simply treating ill health, nurses were encouraged to promote health and prevent illness (Crotty, 1993). Research shows that nurses have the ability to successfully deliver behaviour change interventions to patients in relation to weight management. For example, Whittemore et al. (2004) found that nurses delivered successful interventions in patients with type 2 diabetes.

However, previous studies demonstrate that the attitudes and perceptions of trainee and gualified nurses around obesity are not always positive (Clark and Maben, 1998; Howard, 2001; Jowett et al., 1994; Poon and Tarrant, 2009). Attitudes and skills are not developed with age and experience, but are developed at undergraduate level (Dunn and Hunsford, 1997). Hence targeting undergraduate nurse education is an opportunity to assist student nurses to develop their skills and confidence in working positively with overweight patients. However, university training can lack focus around providing student nurses with the techniques to facilitate behaviour change, and they feel ill-equipped with the skills to communicate effectively with patients around weight management (Brown and Thomspon, 2007; Keyworth et al., 2012). It is important that training is evidence-based as students can perceive theoretical aspects of their course as irrelevant to clinical practice and 'common sense' (Howard, 2001, p. 34).

However, a systematic review conducted on medical students identified that effective training around obesity management is scarce (Chisholm et al., 2012b). Only 12 studies met inclusion criteria and intervention content tended to be poorly reported and measures to control for the risk of bias were rarely utilised. Other research has also highlighted that medical educators encounter difficulties implementing and delivering obesity management education in accordance with the General Medical Council's guidelines to medical students (Chisholm et al., 2013). Qualitative interviews with medical educators described these difficulties as being due to a lack of Faculty support and available guidance about what behaviour change education includes (Chisholm et al., 2013). Together this may explain reports of insufficient medical education in this area (Moser and Stagnaro-Green, 2009). It remains unknown if the situation is similar for nurse training.

Addressing the obesity epidemic is complex and it has been argued that public interventions are likely to have the greatest effect compared with the small gains achieved through individual lifestyle interventions (Jain, 2005; Loveman et al., 2011). However, given the opportunities that nurses consistently encounter with patients, it is important that they are able to and are confident enough to intervene where obesity is a relevant issue to patients' health. Hence it is relevant to investigate whether interventions regarding obesity are being implemented into undergraduate nursing courses.

The present study sought to conduct a systematic review to identify studies that have assessed educational interventions in undergraduate nurse training on obesity management. It aimed to address the following: Are obesity-related educational interventions present in undergraduate nursing curricula? If so, how effective are they and what is the quality of these interventions? The PICOS (Population, Intervention, Comparators, Outcomes, Study Design) criteria guided this review and inclusion criteria were developed alongside it in order to determine relevant articles for review. This systematic review should identify what makes up effective obesity management education for student nurses, thus informing better preparation of nurses for practice and would allow for the synthesis of evidence regarding effective educational interventions in this area.

#### Method

#### Search strategy

A systematic review was undertaken in order to collate literature that evaluates obesity-related educational interventions within undergraduate nursing curricula. The following databases were systematically searched (final search on 13th September 2011): PsycInfo, OvidMedline, British Nursing Index and Embase (guided by The Centre for Reviews and Dissemination, CRD, 2009). The PICOS criteria were used to develop the search terms and inclusion criteria. Search terms referred to the target population (undergraduate nursing students), intervention (educational methods used) and outcomes. The inclusion criteria aimed to retrieve research published in English that included undergraduate nursing students. Studies had to include an educational or training programme that related, explicitly or implicitly, to obesity (e.g., topics such as weight loss or increasing exercise). The outcomes of the research needed to contain at least one qualitatively or quantitatively measured outcome. Therefore, research that contained no measured outcomes was excluded due to the focus of the review being to establish the effectiveness and quality of interventions. The comparator and study design components of the PICOS criteria were not considered during the selection of studies since these are common within educational research which tends not to include a comparison or control group (Cook et al., 2007). Additionally, studies were included if they involved other populations (for example, undergraduate midwives) provided that some proportion of the sample comprised undergraduate nurses. Table 1 provides a list of the search terms. Search terms were combined from these three sets using 'AND' whilst the truncation function (\$) was used to explode the search terms and the '.mp' function was used to search titles, abstracts and full texts. To limit results, an advanced search was applied: 'English 1990-Present'. It was appropriate to search from 1990 as this was when Project 2000 (UKCC, 1986) was being implemented and nurses' roles were becoming more focused on health promotion. This search strategy was applied to all databases that were used within the review. Only published data were included to ensure the findings would be replicable.

#### Study selection

Initially, titles and abstracts were screened (by AF) in order to assess whether they were relevant to the review's aims: did they include a reference to nurse education and an obesity-related topic? Potentially

#### Table 1

Terms used within systematic review search strategy.

- 1. undergraduate nur\$/ or student nurs\$/ or undergraduate nurs\$ training/ or undergraduate nurs\$ education.mp
- 2 obes\$.mp
- 3. weight management.mp
- 4. weight control.mp
- 5. weight loss.mp
- 6. exercis\$.mp
- 7. health promot\$.mp 8.
- nutrition.mp
- 9. intervention\$.mp
- 10. obes\$ prevention.mp
- 11. exercis\$ promotion.mp
- 12. lifestyle.mp
- 13. behavi\$ change.mp
- behave\$ change intervention\$.mp 14.
- 15. weight management intervention\$.mp
- 16. attitude\$.mp
- 17. confiden\$.mp
- 18. skill\$.mp
- 19. knowledge.mp
- 20. 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15
- 21. 16 or 17 or 18 or 19
- 22. 1 and 20 and 21
- 23. Limit 22 to (English language:1990-current)

Download English Version:

## https://daneshyari.com/en/article/368130

Download Persian Version:

https://daneshyari.com/article/368130

Daneshyari.com