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## Title Page

**Title:** The provision of weight management advice: An investigation into occupational therapy practice

**Running Title:** Provision of weight management advice

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## Abstract

**Background/aim:** Obesity affects more than half the Australian population and has become epidemic throughout the world. Little is known regarding occupational therapy interventions with clients who are overweight or obese. This study aimed to identify occupational therapy practice in relation to the provision of weight management. This was part of a larger study investigating health professional practice.

**Methods:** A cross sectional study design using a self-administered, purpose designed survey was employed to identify the current practices of occupational therapists working in a regional area of NSW, Australia. Participants were recruited via email or mail as publically available.

**Results:** Fifty-one occupational therapists anonymously completed the survey. Results revealed that 53% (n=26) of respondents did not consider weight management to be within their scope of practice or their workplace role description. The most common intervention was the provision of physical activity advice (65.2%; n=30). Dietary advice was provided by 20.8%(n=10), while 77%(n=32) referred onto dietitian services. During entry level occupational therapy education, only 7.8% (n=4) had received weight management advice education. Completion of post graduate professional development training in this area was reported by 14% (n=7) of respondents.

**Conclusion:** This study provides insight into the current practices of Australian occupational therapists in relation to the provision of weight management advice. This research displays a need to acknowledge both a generic and a discipline specific role for the provision of healthy lifestyle interventions. This may be achieved through better access to education during entry level programs and in the workplace.

**Key Words:** lifestyle, obesity, occupational therapy, overweight, exercise.

## **Introduction**

The focus of occupational therapy is on the beneficial health effects of participation and engagement in meaningful occupations (Scaffa, Van Slyke, Brownson, & Roley, 2008). For people with obesity, experiencing occupational deprivation may be a daily part of life, as weight can inhibit participation (Forhan, Law, Vrkljan, & Taylor, 2010). Occupational therapists can play an important role in the development of strategies that facilitate occupational participation and engagement to reduce the detrimental impact obesity has on everyday occupation (Forhan, Law, et al., 2010; Peeters, Bonneux, Nusselder, De Laet, & Barendregt, 2004). This potential role is significant given that the rate of obesity is increasing worldwide (World Health Organisation (WHO), 2000). Despite the scale of this problem, there is limited occupational therapy practice literature on the best methods to ensure this client group are engaged in healthy occupations.

A study of the Australian adult population found that more than half were overweight or obese (Australian Bureau of Statistics (ABS), 2007). In population health research, obesity is classified by a body mass index (BMI) of 30 or more, established by dividing weight in kilograms by squared height in meters squared (WHO, 2000). The health risks associated with obesity include psychological stress, coronary heart disease, type 2 diabetes, ischemic stroke, and a higher rate of mortality and morbidity compared to people with a healthy weight (WHO, 2000).

The prevention of obesity may be achieved through promotion of environmental and lifestyle changes (Australian Institute of Health and Welfare, 2003). Internationally, initiatives such as Canada's National Obesity Network (Canadian Obesity Network, 2011) provides information for the development of prevention strategies and treatments for obesity . While there is no parallel network in Australia, Federal Health Ministers have called for the

health workforce to be up-skilled in the area of prevention and this includes obesity management (Department of Health and Ageing, 2010). The state of New South Wales (NSW) has prioritised obesity management with the aim to guide intervention and support weight loss, which requires all health professionals to develop their knowledge of obesity and implications for practice interventions (NSW Health, 2008).

To provide evidence-based practice (EBP) interventions, occupational therapists are required to maintain professional currency regarding evidence-based weight management guidelines (Murray & Lawry, 2011; National Health and Medical Research Council (NHMRC), 2003). These guidelines are then integrated with clinical expertise and client preferences to ensure clinically relevant interventions (Bennett et al., 2003). However, little is known about evidence-based knowledge that informs occupational therapist provision of healthy lifestyle advice, or how it is implemented in practice. For the purpose of this study, the authors have distinguished the term ‘weight management’, to describe strategies including measuring weight loss, nutritional intake and physical activity; and ‘occupation based obesity management’ as a broader term used to describe occupation based strategies such as the remedial use of occupation, equipment prescription and home modifications.

### ***Implication for occupational therapy practitioners***

Occupational therapists can promote health by engaging people in occupations of choice through the use of a health promotion framework to structure practice (Letts, 2009). A focus of health promotion is to promote healthy living, which corresponds with the role that occupational therapists can play in the promotion of healthy lifestyles (Scaffa, et al., 2008; Scriven & Atwal, 2004). Forhan (2008) identified a specific occupational therapy role when working with clients who are obese: to enable participation in occupations of choice. Using occupations of choice to structure interventions, may have a positive effect for clients who

are obese, as the intervention is not centred on the negative health problem of obesity, rather on the enjoyment of occupation.

A person who is obese may have difficulty participating in everyday activities. With no intervention, obesity can lead to long term restrictions and dissatisfaction with performance in occupations of self-care, leisure and productivity (Forhan et al., 2010). Peeters, et al., (2004) found that adults with obesity were twice as likely to have limitations, with their activities of daily living, than their normal-weight equivalents over a 46 year follow-up period. Occupation based obesity management advice for clients who are overweight or obese is important to avoid clients becoming occupationally deprived. Focusing on enabling clients to participate in meaningful occupations can assist weight reduction and increase quality of life (Forhan, Law, et al., 2010). The provision of education on healthy lifestyles can also assist clients to maintain a healthy body weight (Kuczmarski, Reitz, & Pizzi, 2010).

### ***Current interventions***

Mosley, et al., (2008) identified three levels of care: primary- which focuses on preventing obesity from occurring in at risk individuals; secondary- which encompasses early detection and obese management; and tertiary- which provides interventions for individuals who have significant health issues and are extremely obese. Clark, Reingold, and Salles-Jordan (2007) suggested that practitioners can work with individuals in all levels, through interventions such as healthy lifestyle groups aimed at either prevention or at changing unhealthy behaviours, and by increasing client independence. Practitioners in the UK enable personal skill development; and act within secondary or tertiary health promotion (Scriven & Atwal, 2004). Some occupational therapy practitioners are currently involved in occupation based obesity management, and provide individual treatment plans that include: addressing weight-

related issues through occupation, setting goals and prioritising activities (Mosley, Jedlicka, LeQuieu, & Taylor, 2008; Thordardottir & Persson, 2009).

In a Swedish study, occupational therapy clients engaged in an obesity rehabilitation program were shown how to set goals and to prioritize and structure their activities to handle stress and develop a balanced lifestyle (Thordardottir & Persson, 2009). In an additional healthy lifestyle program, interventions were developed that enabled clients to reduce their weight through modifying habits, roles and overall lifestyle patterns (Clark, et al., 2007). Weight loss has been shown to be more effective when assisted through a structured program than using self help methods (Heska S et al., 2003). Occupational therapists help clients develop and implement individualised structured approaches to lifestyle change, however no intervention studies were identified that indicated the success of such occupational therapy interventions in weight management for clients.

A difference in time use was found by Forhan, Law, Vrkljan and Taylor (2011) between the general population and individuals with obesity, across daily activities, work, rest and recreation. They identified a difference in time use between the general population and individuals with obesity in work, rest and recreation. Individuals with obesity spent almost three times as much on daily activities and less time in work activities when compared to the general population. This supports the need for occupational therapists to employ techniques which encourage occupational balance. These techniques include energy conservation which increases efficiencies in the time required to complete self-care activities. Consequently, freeing time for occupational balance across the areas of work, rest and recreation and increasing socialisation through community access (Forhan, Law, Vrkljan, & Taylor, 2011). During the provision of interventions, occupational therapists may incorporate remedial strategies, which aim to increase body strength and endurance to improve participation in daily activities (Radomski, 2008). Alongside this, compensatory strategies,

which include the provision of adaptive equipment, may be required to ensure occupational engagement (Foti, 2005). Appropriate modification to the home and adapting a client's supportive environment can also increase occupational participation (Tanner, 2011). Although these strategies are recommended, they have not been specifically evaluated with clients who are obese.

Practitioners already consider weight when prescribing equipment to ensure a safe intervention, and can help to engage clients in health-promoting activities (Clark, et al., 2007). Clients who are obese need specially designed bariatric equipment to modify activities of daily living. Bariatric is described as the branch of healthcare concerned with treating obesity (Forhan, et al., 2010). When equipment is prescribed correctly, such as by occupational therapists in the hospital setting, it enables a more independent life, minimising the risk of injury for the individual, their carer and health care workers (Carlson, 2008).

While occupational therapists do receive referrals for people with a primary diagnosis of obesity, there is also a broader role for occupational therapists; working with clients for whom obesity is a comorbidity (Forhan, 2008). For example, when working with clients who have chronic diseases, such as heart conditions, the provision of advice and education on weight loss is part of secondary prevention for controllable risk factors and focuses on establishing healthy activity levels (Huntley, 2008). In addition, occupational therapists in the mental health sector provide diet related interventions for people living with mental illness, many of whom are at a greater risk of obesity than the general population (Keck & McElroy, 2004; Mahony, Haracz, & Williams, 2010). The increasing prevalence of obesity indicates a need for occupational therapists to be involved in both weight and occupation based obesity management, yet there is limited literature that describes current occupational therapy practice in this area.

The research aims of this study are:

1. to investigate occupational therapists' attitudes about their role in the provision of weight management advice; and,
2. to identify what, if any, interventions occupational therapists provide to clients relating to weight management; and,
3. to determine if occupational therapists had received education at entry level or completed professional development training in weight management.

## **Method**

Ethical approval for this cross-sectional survey was provided by the Human Research Ethics Committees of the Area Health Service and the local University.

### ***Participants***

The data used in this study was part of a larger study, the Community Healthy Adults Project (CHAP) (Snodgrass et al., 2012). Convenience sampling was used to recruit participants.

Seven health professional disciplines were surveyed in the CHAP study, including occupational therapists, exercise physiologists, nurses, occupational health nurses, dietitians, physiotherapists and psychologists. The current article is a secondary analysis of the occupational therapists (n=51) responding to the CHAP study.

### ***Instrument***

The questionnaire developed for use in the study was based on previously published studies regarding the provision of dietary and healthy lifestyle advice (Collins, 2003; Counterweight-Project-Team, 2004; Sack, Radler, Mariella, Touger-Decker, & Khan, 2009). The questionnaire focused on weight management in general and contained subsections about: general demographics and workplace information, level of education, nutritional knowledge, confidence in providing healthy lifestyle advice, attitudes towards obesity, and healthy lifestyle advice currently provided for overweight and obese clients. The questionnaire consisted of 48 open and closed questions. Prior to use, the draft questionnaire was tested

with an expert panel of academics (n=9) and practicing allied health professionals (n=8) and then modified in response to the feedback given, to establish face and content validity.

### ***Procedure***

Ethical approval was received in October 2010. Following this all occupational therapy participants employed in private practices and government-funded health services in public health region in New South Wales, Australia, were contacted via email or publically available postal addresses. Participants received an email inviting participation in the study. One week later participants were either sent a paper based survey with a pre-addressed reply paid envelope, or emailed a link to an online survey tool (survey monkey <sup>TM</sup>) with the information statement. A follow-up reminder/ thankyou postcard was sent, four weeks later, to encourage completion of the questionnaire. Consent to participate was assumed on receipt of anonymously completed questionnaires.

### ***Data Analysis***

The statistical program JMP (Version.8.0) was used to manage and analyse the data. Descriptive statistics (means, percentages,) were calculated for continuous and categorical data.

### **Results**

In the CHAP study, 1493 surveys were sent to workplaces, and 259 survey responses were received (an overall response rate of 20%). As a result of the distribution method of the survey, the exact number of each discipline within the sample population is unknown. It is not possible to accurately calculate the response rate of occupational therapists. This study analysed the 51 occupational therapist responses received. There were some missing responses to the questionnaire therefore the total responses for some items are less than 51. Of the 51 occupational therapist respondents, 90.2% (n = 46) were female and 9.8% (n = 5) male.

### ***Respondent demographics***

Eighty two percent (n = 42) of respondents held an entry level qualification in occupational therapy, with nine respondents holding a post graduate qualification. Mean years of professional experience was 10 (SD = 7.6, range = <1 to 30). The most frequently reported years of experience were between zero and five years (39.2%, n = 20). Survey responses came from major cities (43.1%, n = 22), regional areas (51.0%, n = 26) and remote areas (3.9%, n = 2), as categorised by the Australian Standard Geographical Classification (ABS, 2003). Workplaces represented were, public hospitals, community, rehabilitation centres, private practice, occupational health, mental health and other. Please see Table 1 for details.

*Please insert Table 1 around here*

### ***Attitudes and opinions of respondents***

Fifty three percent (n = 26) of respondents reported that the provision of weight management advice to clients who are obese was not within the scope of their practice. Two-thirds of respondents in public hospitals felt it was not within their scope of practice (n = 12), while all those respondents in private practices, general practice, occupational health and mental health felt it was (n = 8). Of those working in community practice (n=16) nine respondents also felt it was within the scope of their practice to provide advice.

Forty-five percent (n = 20) of respondents agreed or strongly agreed that they were motivated to treat clients who are obese, compared to 20% (n=9) who disagreed or strongly disagreed and 34% (n=15) who were unsure. Respondents reported that the provision of physical activity advice was very effective (60%, n = 27) or somewhat effective (40%, n = 18) in treating obesity, while dietitian advice was perceived as very effective (45.5%, n = 20), somewhat effective (52.3%, n = 23) or not effective (2.3%, n = 1). Respondents believed a combination of diet and exercise was very effective (86.7%, n = 39) or somewhat effective (13.3%, n = 6) in treating obesity.

### ***Weight management interventions***

Forty-four percent (n=22) of respondents classified half or more of all clients seen in their practice as overweight or obese. The most common intervention for management of clients who are obese was to refer them onto dietitian services (77%, n=32), followed by was the provision of physical activity advice (65.2%, n = 30). Dietary advice was provided by 20.8% (n = 10), and 16% (n=8) used the principles of Cognitive Behavioural Therapy. Of the respondents who detailed their interventions, five respondents used all these interventions in practice. Additional interventions are detailed in Table 2. Comparison between different workplace settings was not feasible due to the small number of respondents. Outcome measures of waist circumference, reduction of body weight and clients self-report were completed by 15.7% (n=8) to monitor weight management.

*Insert Table 2 about here*

Respondents also mentioned the using the following interventions: education, both nutrition specific and exercise specific; referral to appropriate services; encouragement/opportunity to engage in physical activity and encouragement to engage in a healthy lifestyle program. To provide these interventions respondents identified they needed: education and training in this area; an education pamphlet about weight management to handout to clients; increased knowledge of available referral services and evidence based practice to assist in providing appropriate advice; and more clinical time to discuss these issues with clients.

### ***Professional development***

In 90% (n=43) of workplaces, occupational therapists reported there were no guidelines for the management of obese clients. During entry level occupational therapy education, only four respondents had received weight management advice education. Seven respondents reported they had completed professional development training in this area. Of those that

were provided with entry level education in weight management (n=4), half felt it was part of their role to provide weight management advice to clients who are obese. Of the 7 who completed professional development training in this area, four felt it was part of their role to provide weight management advice. Two respondents reported to have received both entry level and professional development training in weight management, while 70% (n=35) reported they had not received either.

## **Discussion**

This paper reports on the results of a survey that explored the practices and beliefs of occupational therapists in one public health region of NSW in their work with people who are overweight or obese. This included information on occupational therapists' attitudes, current interventions and completed professional development.

### *Attitudes and opinions of respondents*

Despite previous studies identifying the potential role that occupational therapists can play in supporting weight and occupation based obesity management (Clark, et al., 2007; Forhan, 2008; Foti, 2005; Mosley, et al., 2008), most respondents identified that provision of weight management advice was not part of their workplace's role description, or perceived to be within their scope of practice. The majority of these occupational therapists worked in the public hospital sector, which is often the first point of contact for people and may reflect time pressures in the public system. Rather than providing healthy lifestyle advice they referred clients to dietitians and general practitioners, suggesting that occupational therapists may not universally recognise the potential role they can play in facilitating weight loss (Clark, et al., 2007). Nevertheless, those respondents who worked within the rehabilitation and community sectors considered that weight management was part of their role, which is consistent with the view that rehabilitation can enable people with obesity to lose weight (Forhan, et al., 2010). Almost half of the therapists in the current study reported that they were motivated to

treat clients who are obese. Motivation is an important factor in healthcare and in any occupation, as the Model of Human Occupation (MOHO) suggests that each person has volition, which encompasses motivation to perform tasks (Kielhofner, 2008), thus practitioners motivated to treat clients who are obese may be more likely to persist with interventions.

### ***Weight management interventions***

The respondents who completed this survey reported that the majority of clients seen in their workplaces are obese. Thus occupational therapists are already working with this client group, even when obesity is not considered the primary diagnosis (Mosley, et al., 2008). Practitioners are therefore in the ideal position to enable occupational participation, in addition to the provision of generic education and advice related to weight management (Foti, 2005).

Occupational therapists often provide the first opportunity for individuals to discuss the effects of weight on occupation (Forhan & Richmond, 2002). In some settings and geographical locations clients may only have access to a limited number of services, and thus a limited opportunity to discuss weight and obesity management, which supports the importance of a health promotion role. Recent research found occupational therapists working within mental health settings were engaged in diet education and interventions (Mahony, et al., 2010). The majority of respondents in this study reported providing physical activity advice, with some also providing dietary advice, yet have never received professional education in this area. These interventions should meet current clinical practice guidelines, with long-term weight loss best achieved through a combination of reducing energy intake and increasing physical activity (NHMRC, 2003). Physical activity advice may be presented as an intervention to adapt or change unhealthy occupations, in order to increase energy expenditure across all activities of daily living (Kuczmarski, et al., 2010).

A main component of treatment within occupational therapy is the development of client-centred goals (Duncan, 2011). However, respondents did not consider goal setting for weight management as part of the occupational therapy role. Weight loss goal setting is an intervention that can be integrated into the provision of other interventions. Occupational therapists may also analyse client habits, roles and patterns of occupations which may contribute to obesity (Kuczmarski, et al., 2010). Occupational therapy best practice involves the use of outcome measures, which evaluate goal achievement and are required both ethically and professionally (Duncan, 2011). However, only a small number of respondents indicated they used specific measurements for weight management which may be in part because respondents were more interested in occupational outcomes than weight reduction outcomes, particularly where they did not see weight management as their role.

### ***Professional Development***

Despite the existing Federal and State policies, and evidence-based guidelines for the management of obesity (NHMRC, 2003; NSW Health, 2008), the majority of respondents reported that their workplaces did not provide guidelines to treat clients who are obese. Having specific workplace based clinical pathways and comprehensive education and roles for health professionals could optimize health outcomes for overweight and obese clients engaged in care within the health services. Easier access to these clinical guidelines may assist and improve occupational therapists implementation of healthy lifestyle advice. In order to apply these guidelines, practitioners need to be aware that they exist, and know how to implement them into practice. These findings replicate the findings of Canadian researchers who found that healthcare professionals wanted multidisciplinary obesity protocols to be developed to inform practice (Forhan, et al., 2010). The development of occupational therapy specific guidelines could provide practitioners with an additional resource. This would meet the need of study respondents, who, although willing to provide

interventions, identified their need for more education and training on strategies to assist them. The findings of this study indicated that professional development training in weight management influenced the provision of advice, which supports and reflects Forhan's (2008) opinion that educated occupational therapists can enable the prevention and treatment of obesity.

The increase in obesity rates across all age groups (ABS, 2007) indicates the need for increased education and training on weight management. Over two-thirds of respondents reported having no training in this area. Respondents perceived that entry-level programs did not include information on this topic, with many occupational therapists unsure if weight management was within their role. This situation is not unique to Australia, as Canadian researchers also found that obesity training is not part of initial or continuing education curriculum (Forhan, et al., 2010). The gap in training may be targeted through its inclusion in entry level programmes. However, for current members of the work force, education provided by the workplace can implement a change in practitioners understanding of their role in the provision of weight management advice. Such education strategies will ensure the profession develops to meet current health trends (Murray & Lawry, 2011).

### ***Relevance to clinical occupational therapy practice***

The development of the occupational therapy role in obesity management is relevant to practice as practitioners are increasingly working with this client group. The generic role of imparting healthy lifestyle advice is not a new concept for health professionals; rather it is implicit in their duty of care, to provide an ethical dimension to practice and needs to be reinforced to ensure practitioners provide interventions with this client group (Murray & Lawry, 2011). Obesity management is within the theoretical foundations of occupational therapy practice as occupation can enable healthy lifestyles (Duncan, 2011; Scaffa, et al., 2008). However, role acceptance appears to be linked to the workplace, with this varying

between different work environments. Nevertheless, this is an area that should be part of all therapists' practice regardless of work setting as this should be part of a health promotion approach. Many practitioners in the public hospital sector did not recognise weight and obesity management to be part of their role. As the public health sector offers many opportunities for occupational therapists to engage in this role it is an area of practice that can be developed and further research is recommended.

### **Strengths, limitations and implications for future research**

This study explored the knowledge and practice of occupational therapists, in regard to clients who are overweight or obese, within one public health region of NSW and identified that there is a role for occupational therapists in obesity management. However, there were some study limitations, which included the small study sample from one regional public health area and few respondents from the mental health, occupational health and private practice sectors. Therefore, the results may not be generalisable to occupational therapists working in all sectors, or in other geographical regions of Australia, or overseas. The broader study questionnaire solicited generic information of all allied health disciplines (Ashby et al., 2012) and hence did not allow for discipline-specific questions about occupational therapists' engagement of people in healthy occupations which limits the specificity of the results. It is recommended that further research investigates the occupational therapy specific issues, the influence of the workplaces on practice and effective ways to develop this role for occupational therapy practitioners.

### **Conclusion**

This study offers an insight into Australian occupational therapists' provision of weight management and obesity management advice to clients who are obese. While the majority of occupational therapists considered weight management to be outside their scope of practice, occupational therapists could play a role in the provision of weight and obesity management

within the health care team. For this to occur requires an acceptance that it is both a generic and a discipline specific role and these roles need to be defined within specific health service clinical pathways. Access to education through entry level programs and workplaces and postgraduate professional development is warranted. The results from this study can inform service provision and further Australian wide research in this area.

## References

- Ashby, S., James, C., Plotnikoff, R., Collins, C., Guest, M., Kable, A., & Snodgrass, S. (2012). Survey of Australian practitioners' provision of healthy lifestyle advice to clients who are obese. *Nurs Health Sci*, 14(2), 189-196. doi: 10.1111/j.1442-2018.2012.00677.x
- Australian Bureau of Statistics (ABS). (2003). *ASGC remoteness classification: Purpose and use (Census paper no. 03/01)*. Canberra, ACT: Commonwealth of Australia. Retrieved from [http://www.abs.gov.au/websitedbs/d3110122.nsf/0/f9c96fb635cce780ca256d420005dc02/%24FILE/Remoteness\\_Paper\\_text\\_final.pdf](http://www.abs.gov.au/websitedbs/d3110122.nsf/0/f9c96fb635cce780ca256d420005dc02/%24FILE/Remoteness_Paper_text_final.pdf).
- Australian Bureau of Statistics (ABS). (2007). *Article: Overweight and obesity*. (4102.0). Commonwealth of Australia. Retrieved from [http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/2586A287F0EE3016CA25732F001C96BF/\\$File/41020\\_Overweight%20and%20obesity\\_2007.pdf](http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/2586A287F0EE3016CA25732F001C96BF/$File/41020_Overweight%20and%20obesity_2007.pdf).
- Australian Institute of Health and Welfare. (2003). A growing problem: trends and patterns in overweight and obesity among adults in Australia, 1980 to 2001. Bulletin No. 8. AIHW Cat. No. AUS 36. Retrieved from <http://www.aihw.gov.au/publications/aus/bulletin08/bulletin08.pdf>
- Bennett, S., Tooth, L., McKenna, K., Rodger, S., Strong, J., Ziviani, J., . . . Gibson, L. (2003). Perceptions of evidence-based practice: A survey of Australian occupational therapists. *Australian Occupational Therapy Journal*, 50, 13-22. doi: 10.1046/j.1440-1630.2003.00341.x
- Canadian Obesity Network. (2011). Canadian Obesity Network, from <http://www.obesitynetwork.ca/>
- Carlson, A. H. (2008). Handle with care. *Rehab Management: The Interdisciplinary Journal of Rehabilitation*, 21(9), 33-35.
- Clark, F., Reingold, F. S., & Salles-Jordan, K. (2007). Obesity and occupational therapy (position paper). *American Journal of Occupational Therapy*, 61, 701-703.
- Collins, C. E. (2003). Dietetic management of overweight and obesity: A comparison with best practice criteria, nutrition & dietetics. *Journal of the Dietetic Association of Australia*, 60, 177-184.
- Counterweight-Project-Team. (2004). Current approaches to obesity management in UK primary care: the counter-weight program. *Journal of Human Nutrition and Dietetics*, 17, 183-190.
- Department of Health and Ageing. (2010). *Taking Preventative Action*. Canberra: Commonwealth of Australia Retrieved from <http://www.preventativehealth.org.au>.
- Duncan, E. A. S. (2011). Skills and processes in occupational therapy. In E. A. S. Duncan (Ed.), *Foundations for practice in occupational therapy* (5th ed., pp. 33-42). Edinbrough: Churchill.
- Forhan, M. (2008). *Obesity and healthy occupation*. Paper presented at the CAOT Professional Issue Forum, Whitehorse, YT.
- Forhan, M., Bhambhani, Y., Dyer, D., Ramos-Salas, X., Ferguson-Pell, M., & Sharma, A. (2010). Rehabilitation in bariatrics: opportunities for practice and research. *Disability and Rehabilitation*, 32, 952-959. doi: 10.3109/09638280903483885

- Forhan, M., Law, M., Vrkljan, B., & Taylor, V. (2011). Participation Profile of Adults With Class III Obesity. *OTJR*, *31*, 135-142.
- Forhan, M., Law, M. C., Vrkljan, B. H., & Taylor, V. H. (2010). The experience of participation in everyday occupations for adults with obesity. *Canadian Journal of Occupational Therapy*, *77*, 210-218.
- Forhan, M., & Richmond, J. (2002). The impact of obesity on occupation: Implications for occupational therapy. *Occupational Therapy Now*, *4*(2), 19-21.
- Foti, D. (2005). Caring for the person of size. *OT Practice*, *10*(2), 9-14.
- Heska S, Anderson J, Atkinson R, Greenways E, Hill J, Phinncy S, & et al. (2003). Weight loss with self help compared with a structured commercial program: A randomised trial. *Journal of the American Medical Association*, *289*, 1792-1798.
- Huntley, N. (2008). Cardiac and pulmonary diseases. In M. V. Radomski & C. A. Trombly Latham (Eds.), *Occupational therapy for physical dysfunction* (6th ed., pp. 1295-1320). Baltimore, MD: Lippincott.
- Keck, P. E., & McElroy, S. L. (2004). Bipolar disorder, obesity, and pharmacotherapy-associated weight gain. *Journal of Clinical Psychiatry*, *64*, 1426-1435.
- Kuczmariski, M., Reitz, S. M., & Pizzi, M. A. (2010). Weight management and obesity reduction. In M. E. Scaffa, S. M. Reitz & A. A. Pizzi (Eds.), *Occupational therapy in the promotion of health and wellness* (pp. 253-279). Philadelphia: F.A. Davis Company.
- Letts, L. (2009). Health promotion. In E. B. Crepeau, E. S. Cohn & B. A. B. Schell (Eds.), *Willard and Spackman's occupational therapy* (11th ed., pp. 165-180). Philadelphia: Lippincott Williams & Wilkins.
- Mahony, G., Haracz, K., & Williams, L. (2010). *How do mental health occupational therapists address issues of weight with their clients? A qualitative study*. (Unpublished Honours manuscript), School of Health Sciences, University of Newcastle, Newcastle, NSW.
- Mosley, L. J., Jedlicka, J. S., LeQuieu, E., & Taylor, F. D. (2008). Obesity and occupational therapy practice. *OT Practice*, *13*(7), 8-14.
- Murray, C., & Lawry, J. (2011). Maintenance of professional currency: Perceptions of occupational therapists. *Australian Occupational Therapy Journal*, *58*, 261-269. doi: 10.1111/j.1440-1630.2011.00927.x
- National Health and Medical Research Council (NHMRC). (2003). *Clinical practice guidelines for the management of overweight and obesity in adults*. Canberra, Australia: Commonwealth of Australia Retrieved from [http://www.health.gov.au/internet/main/publishing.nsf/Content/7AF116AFD4E2EE3DCA256F190003B91D/\\$File/adults.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/7AF116AFD4E2EE3DCA256F190003B91D/$File/adults.pdf).
- NSW Health. (2008). *Framework to support adults managing obesity and morbid obesity*. Sydney, NSW: Hunter New England NSW Health.
- Peeters, A., Bonneux, L., Nusselder, W. J., De Laet, C., & Barendregt, J. J. (2004). Adult obesity and the burden of disability throughout life. *Obesity Research*, *12*(7), 1145-1151.
- Radomski, M. V. (2008). Planning, guiding and documenting practice. In M. V. Radomski & C. A. Trombly Latham (Eds.), *Occupational therapy for physical dysfunction* (6th ed., pp. 40-64). Baltimore, MD: Lippincott.
- Sack, S., Radler, D. R., Mariella, K. K., Touger-Decker, R., & Khan, H. (2009). Physical therapists' attitudes, knowledge, and practice approaches regarding people who are obese. *Physical Therapy*, *89*, 804-815.
- Scaffa, M. E., Van Slyke, N., Brownson, C. A., & Roley, S. S. (2008). Occupational therapy services in the promotion of health and the prevention of disease and disability. *American Journal of Occupational Therapy*, *62*, 694-703.
- Scriven, A., & Atwal, A. (2004). Occupational Therapists as Primary Health Promoters: Opportunities and Barriers. *The British Journal of Occupational Therapy*, *67*(10), 424-429.

- Snodgrass, S., Guest, M., Collins, C., Plotnikoff, R., Kable, A., James, C., & Ashby, S. (2012). Provision of healthy lifestyle advice to overweight and obese clients: a survey of allied health professional practices. *Public Health Nutrition*, under review.
- Tanner, B. (2011). The home environment. In E. Ainsworth & D. d. Jonge (Eds.), *An occupational therapist's guide to home modification practice* (pp. 3-16). Thorofare: SLACK Incorporated.
- Thordardottir, B., & Persson, D. (2009). "Weighing my options" Clients experience of occupational therapy in obesity rehabilitation. (Undergraduate essay), Medicinska Fakulteten, Lund University, Lund, Sweden.
- World Health Organisation (WHO). (2000). Obesity: Preventing and managing the global epidemic. Geneva, Switzerland.

Table 1. Respondents workplace demographics

<b>Workplaces</b>	<b>Respondents: N=50 (%)</b>
Public Hospitals	n=18 (35.3)
Community (aged care and home care workers)	n=16 (31.4)
Rehabilitation Centres	n=7 (13.7)
Private practice	n=4 (7.8)
Occupational health	n=2 (3.9)
Mental health	n=2 (3.9)
General practice	n=1 (2)

**Table 2**

*Frequency of respondents' (N = 51) use of specific interventions with clients who are obese*

<b>Specific Interventions</b>	<b>Responses <i>n</i></b>	<b>Frequently/Always <i>n</i> (%)</b>	<b>Rarely/Sometimes <i>n</i> (%)</b>	<b>Never <i>n</i> (%)</b>
<b>Measure BMI</b>	45	5 (11.1)	18 (46)	22 (48.8)
<b>Measure waist circumference</b>	43	3 (6.9)	5 (11.6)	35 (81.4)
<b>Discuss weight loss goals</b>	44	3 (6.8)	19 (43.2)	22 (50.0)
<b>Recommend low GI food</b>	44	3 (6.8)	10 (22.7)	31 (70.5)
<b>Recommend monitoring calories</b>	44	3 (6.8)	13 (29.5)	28 (63.6)
<b>Provide sample menus</b>	44	3 (6.8)	6 (13.7)	35 (79.6)
<b>Recommend increased physical activity</b>	43	17 (39.6)	24 (55.9)	2 (4.7)