Running head: CAAP FINAL PROJECT

Letter of Intent

Addressing Overweight and Obesity Management in Children and Youth

CAAP Final Project Requirement

January, 2006

DANIELLE FLAATHEN

Supervisor: Dr. Shelly Russell-Mayhew

Addressing Overweight and Obesity Management in Children and Youth

Problem Statement

Obesity is quickly becoming one of the most prominent conditions affecting children and adolescents (Chen, Chou, & Yang, 2005; Cook, Wetzman, Auinger, & Barlow, 2005). Traditionally, treatment for obesity has been approached from a medical model (Foster et al., 2003). More recent research has found that in addition to changes in physical activity and caloric intake (medical health); emotional, social, and psychological (mental health) factors must be addressed in order to provide effective treatment to overweight and obese children and adolescents (Braet, 2005; Cook et al., 2005; Hesketh, Wake, & Waters, 2004; Marchesini et al., 2002). In order to promote this holistic approach to obesity treatment, it is necessary to examine the existing evidence and compile it in a format that is easily accessed as well as informative for use of those in the medical health care professions.

Project Rationale

Research has demonstrated that being overweight or obese has both negative physical and mental health implications for children and adolescents (Xie et al., 2005). Complications range from medical conditions such as diabetes, hypertension and pulmonary problems to social isolation, lowered self-esteem, and depression (Burrows & Cooper, 2002; US Preventative Services Task Force [USPSTF]). Despite these facts, studies have shown that physicians may underdiagnose or altogether overlook obesity as a diagnosis (Cook et al., 2005; Durant & Cox, 2005). Underdiagnosis and lack of treatment provisions may be due to several factors. First, physicians may believe that diagnosis will have little impact on the problem (Cook et al., 2005). Second, physicians may hold negative beliefs about the causes of overweight and obesity, ascribing these conditions to such behaviors as lack of self-control, laziness, or a weak will

(Foster et al., 2003). Third, physicians may feel that they are personally unequipped to provide necessary treatment or that the available treatments are ineffective (Foster et al, 2005). Finally, physicians may hold concerns that intervention during childhood may lead to further harm in the areas of labelling, disordered eating, or negative parental intervention (Burrows & Cooper, 2002; Cook et al., 2005; USPSTF, 2005).

For these reasons, this project is timely and necessary to provide medical health care professionals with the evidence pointing to, first, the necessity of sensitive diagnosis and second, the most effective treatment interventions as shown through the research. The purpose of this project is to compile and examine the existing evidence base to determine the components of an effective treatment program. Both physical and mental health interventions will be examined and critically evaluated to determine if these components, individually or in combination, have been demonstrated through the research to be the most effective mechanisms for treating overweight and obesity in children and youth. The end product will consist of a comprehensive literature review as well as reference pamphlet for health care professionals outlining and summarizing the conclusions drawn through the literature review.

Supporting Literature

Presently, one in every seven children in Alberta between the ages of seven and thirteen is considered to be obese (Sarpal, 2005). Consequences of overweight and obesity in children and adolescents include such things as diabetes, elevated blood lipids, increased blood pressure, sleep apnea, and psychosocial and mental health related problems (Burrows & Cooper, 2002; USPSTF, 2005; Sarpal, 2005). Research has shown that individuals that are overweight or obese as adolescents have up to an 80% chance of becoming overweight or obese adults (Sarpal, 2005). It has also been demonstrated that the presence of obesity may lead to the onset of other eating

disorders such as a bulimia, anorexia nervosa, and binge eating disorder (Burrows & Cooper, 2002; Irving & Newmark-Sztainer, 2002).

Treatment of obesity in childhood has been demonstrated to be more effective than treatment in adulthood (Irving & Neumark-Sztainer, 2002). Many of the treatment methodologies that have been utilized in the past, and that continue to be utilized to treat obesity, focus on increased physical activity and reduced caloric intake in order to create an overall negative energy balance (Dunn et al., 2006). This may be due to the focus of traditional medical training placing greater emphasis on the biological components of obesity over the behavioural components (Foster et al., 2003). Research continues to be conducted on the efficacy of these treatment methodologies to determine if diet and exercise are most effective independent of or in combination with each other (Dunn et al., 2006). Despite the fact that diet and exercise have at times been shown to be effective methods, the obesity epidemic is continuing, indicating that there are additional factors to consider in solving this problem.

Increasingly, it is being recognized that effective obesity treatment is much more complex than an energy in, energy out formula (Rippe, McInnis, & Melanson, 2001). Researchers have begun to investigate the relationship between obesity and psychological factors such as low self-esteem, depression, and the role of other emotions on eating patterns (Hesketh et al, 2004; Marchesini, 2002). Depression in overweight or obese children may be related to the social isolation and stigma that these children often face (Sarpal, 2005). In addition to depression; lowered self-esteem, emotional problems, and low social cooperation skills have been found to accompany being overweight or obese (Xie et al., 2005). Overweight or obese children and adolescents are often subject to verbal and physical aggression, peer exclusion, poor peer relationships, few friendships, and perceived lack of support from family (Xie et al., 2005).

These factors may serve to further reduce self-esteem and increase depressive tendencies (Xie et al., 2005). However, if children and adolescents perceive that others will provide them with emotional support, they may redefine potential depressive symptoms and their ability to cope with stigma (Xie et al., 2005).

When confronting overweight and obesity management, there are many areas where intervention can be provided. Psychoeducation can be provided to parents in order to teach them to appropriately manage and monitor influences and activities in their children's lives (Braet, 2005; Dietz, 1999; Durant & Cox, 2005). Parental guidance concerning media exposure is important in order to help children understand media messages regarding body image and to monitor the amount of time that television, music, video games, and other forms of media entertainment take away from physical activities (McIlhaney, 2005). Treatment programs should involve all family members; failure to make change within the family unit is often an indicator that the individual will not be successful either (Durant & Cox, 2005). Family members should be educated about healthy lifestyle choices, medical complications, and healthy, positive ways to motivate individuals to make weight loss changes (Braet, 2005; Durant & Cox, 2005). Other treatment techniques include goal setting, self-monitoring, stimulus control, positive reinforcement, problem solving, and social support (Durant & Cox, 2005). Cognitive restructuring in the areas of managing critical self-talk and regulating distressing emotions is also called for (Irving & Neumark-Sztainer, 2002). Further to this, intervention in the areas of self-esteem and treatment for depression may be required (Marchesini, 2002; Xie et al, 2005).

Methods and Procedures

In order to begin to close the gap that exists in treatment of childhood and adolescent onset of obesity, a comprehensive literature review as well as an informative pamphlet that

summarizes the findings of the literature review and is directed toward the medical community is proposed. Although the rise in rates of obesity in Western society is largely recognized, underdiagnosis and lack of effective treatment methods remains a problem. Therefore, providing those in the health care profession, who are largely responsible for the treatment of obesity, with information on the most effective treatment methodologies, as demonstrated in the literature, is in order.

The main intent of the literature review will be to compile the findings of research that demonstrate the efficacy of both physical and mental health components in treatment methodologies for overweight/obesity in childhood and adolescence. It is anticipated that programs and interventions that focus on factors in addition to food and exercise will show better outcomes. The scope of the literature review will encompass several key areas when addressing obesity management:

1. The focus will be on the treatment of childhood and adolescent overweight and obesity
2. The review will focus on an age range of five to eighteen years in order to include the various age ranges that are present in the literature
3. The review will consider other components that make overweight and obesity management a complex issue which include food addictions, health despite body mass, fat as a moral issue, size prejudice, etc.
4. The review will focus on best practice treatment models and recommendations for medical health professionals in dealing with non-medically related issues in the treatment of overweight and obesity.

The end product will be the production of a pamphlet that will be developed as a quick reference tool for medical health professionals. Topics to be addressed in the pamphlet include:

1. A summary of key points in the literature including facts about the prevalence of obesity, necessity of sensitive diagnosis, and the complexity of the issue
2. Best practice guidelines specific to overweight and obese children and adolescents with a specific focus on the non-medical factors
3. Recommendations for addressing the mental health component in addition to the medical health components in the treatment of obesity in youth.

The literature review will be conducted using the computer search engines Academic Search Premier and PsycInfo. Specific search terms (and combinations thereof) that will be used include obese, overweight, mental health, counseling, strength-based, resiliency, holistic, systemic change, child, adolescent, self-esteem, body image, treatment, quality of life, health, addiction, physician, diet, exercise, management and weight loss. The contents of specific e-journals including the International Journal of Obesity Management and Obesity Research will also be searched using these terms. Searches for specific articles will be performed following cross-referencing from the literature that is retrieved within the initial search parameters. This literature review will encompass research published between 1990 and the present.

Potential Implications

The distribution of the pamphlet that will be produced as the final outcome of this project will be effective for medical and other health care professionals to utilize as a reference tool when working with children and adolescents that are overweight or obese. By presenting weight management as a condition that can be positively managed and that is not solely one that develops as a lack of willpower, there is potential to remove the negativity and stigma that surrounds the onset and management of obesity. There is also potential to increase the success rates of overweight and obesity treatment when professionals are aware of the most effective

treatment methodologies, as proven through the research. Therefore, not only will this end product be important as a guideline for professionals in treatment of overweight and obesity, it will also be important in encouraging professionals to ethically and sensitively engage in the treatment process with overweight or obese individuals.

The literature review will bring together the existing knowledge base regarding the effects of overweight and obesity in children and adolescents and highlight best practices in treatment. There is also potential, throughout the course of the literature review, to identify areas for further research surrounding this topic. Through the completion of this project both professionals and consumers of their services will be provided with increased awareness surrounding this topic as well as increased information about how to effectively address overweight and obesity in youth.

References

Braet, C. (2005). Psychological profile to become and to stay obese. *International Journal of Obesity, 29,* 519-523.

Burrows, A., & Cooper, M. (2002). Possible risk factors in the development of eating disorders in overweight pre-adolescent girls. *International Journal of Obesity, 26,* 1268-1273.

Chen, M.Y., Chou, C.C., & Yang, R.J. (2005). Considering the factors of gender and body weight in the promotion of healthy behavior among adolescents. *Journal of Nursing Research, 13,* 235-242.

Cook, S., Weitzman, M., Auinger, P., & Barlow. S.E. (2005). Screening and counseling associated with obesity diagnosis in a national survey of ambulatory pediatric visits. *Pediatrics, 116,* 112-116.

Dietz, W. (1999). How to tackle the problem early? The role of education in the prevention of obesity. *International Journal of Obesity, 23,* S7-S9.

Dunn, C.L., Hannan, P.J., Jeffery, R.W., Sherwood, N.E., Pronk, N.P., & Boyle, R. (2006). The comparative and cumulative effects of dietary restriction and exercise on weight loss. *International Journal of Obesity, 30,* 112-121.

Durant, N., & Cox, J. (2005). Current treatment approaches to overweight in adolescents. *Current Opinion in Pediatrics, 17,* 454-459.

Foster, G.D., Wadden, T.A., Makris, A.P., Davidson, D., Sanderson, R.S., Allison, D.B., et al. (2003). Primary care physicians' attitudes about obesity and its treatment. *Obesity Research, 11,* 1168-1177.

Hesketh, K., Wake, M., & Waters, E. (2004). Body mass index and parent-reported self-esteem in elementary school children: Evidence for a causal relationship. *International Journal of Obesity, 28,* 1233-1237.

Irving, L.M., & Neumark-Sztainer, D. (2002). Integrating the prevention of eating disorders and obesity: Feasible or futile? *Preventive Medicine, 34,* 299-309.

Marchesini, G., Natale, S., Chierici, S., Manini, R., Besteghi, L., DiDomizio, S., et al. (2002). Effects of cognitive-behavioural therapy on health-related quality of life in obese subjects with and without binge eating disorder. *International Journal of Obesity, 26,* 1261-1267.

McIlhaney, J.S. Jr. (2005). Problems and solutions associated with media consumption: The role of the practitioner. *Pediatrics, 116,* 327-328.

Rippe, J.M., McInnis, K.J., & Melanson, K.J. (2001). Physician involvement in the management of obesity as a primary medical condition. *Obesity Research, 9,* 302S – 311S.

Sarpal, A. (2005). Childhood obesity: Are our children getting bigger? *Alberta Children's Hospital Kids' Doc, 13*.

US Preventive Services Task Force. (2005). Screening and interventions for overweight children and adolescents: Recommendation statement. *Pediatrics, 116,* 205-209.

Xie, B., Chou, C.P., Spruijt-Metz, D., Liu, C., Xia, J., Gong, J., et al. (2005). Effects of perceived peer isolation and social support availability on the relationship between body mass index and depressive symptoms. *International Journal of Obesity, 29,* 1137-1143.