

Problem statement research paper

[Health & Medicine](#), [Obesity](#)



How Effective is Parent Education Classes Related to Exercise and Nutrition Compared With No Education Classes Decrease the Risk of Developing Obesity and the Health Problems Associated With Obesity.

Abstract

Obesity is a pandemic that is affecting many children. If not controlled, this condition will lead to complications when the child is in adulthood. Obesity causes diabetes if they are not controlled. There is a need for parents and nurses to help obese children as they develop. Nurses should help children in their diets as they do not understand the dietary causes of obesity. Nurses should assist obese through advices that will help them reduce their susceptibility of obesity. They should also come up with programs that are geared at reducing foods that encourage obesity. The approach that nurses should take should be that of the whole family as it is hard for children to alter their diets without the help of the family members. It is the parents who control what is taken in the family. Nurses should involve all stakeholders as this is challenge that has long-term effects in the life and growth of the child.

Keywords: Nurse, obese, challenge, complication, diet

Child obesity is an epidemic that is on increase and it is projected to grow at a very high rate with time. Reports have indicated that unlike previous year's obesity in children is becoming more and more prevalent today. The major question that one needs to answer is what the major factors that contribute to child obesity are. Studies in these medical fields have indicated that obesity in children is mainly as a result of lack of exercise and nutrition.

Childhood obesity has also been observed more among African American and Hispanic children in the US than in other groups. Childhood obesity and obesity at all ages exposes such persons to high risk of developing medical and psychological consequences if not addressed. In children who are at risk for becoming overweight or obese how effective is parent education classes related to exercise and nutrition compared with no education classes decrease the risk of developing obesity and the health problems associated with obesity. It has been argued that parents are directly responsible for the obesity state of their children.

Purpose

This study is aimed at educating parents on the importance of preparing health food and encouraging their children to do exercises. The researcher is aimed at setting up education programs which will enlighten parents about the risks of obesity and how to avoid the risks.

Implementation

Theories of health behaviour such as the Health Belief Model (HBM) is a psychological model plays an important role in the implementation of a plan to examine nutrition decrease in children in the two groups; educated and non-educated parents. The theory attempts to explain and predict health behaviours (Heady 2012). The theory that can be used to support my proposed solution by enabling me to develop and deploy an implementation plan of monitoring and measuring childhood overweight /obesity changes in the two groups.

Theoretical framework

The Health Belief Model is a value expectancy theory, which states that an individual's behaviour can be predicted based upon certain issues that an individual may consider (i. e. perceived susceptibility, perceived severity) when making a decision about a particular behaviour concerning their health (Heady 2012). The Health Belief Model is a model used to assess and effect a change in a person's behaviour regarding a specific health condition. This theory based on the fact that the ability of a person to change his or her behaviour is based on Perceived Susceptibility, Perceived Severity and perceive benefit. In Perceived Susceptibility it means that an individual or people will only change behaviour when they perceive that they are at risk. In Perceived Severity it means that the wiliness to change behaviour only depends on how the individual perceive the consequences of not changing. This means that an individual will change if he or she perceives the consequences as severe and may not change if he or she perceives the consequences as not severe. In perceive benefit, this means that an individual will accept and change a health risk behaviour if he perceive that there is benefit in changing.

The process of health education nutritional education will direct parents to make changes on their children diet. Educating parents of what obesity, overweight is and the multiples diseases caused by overweight will motivate them to encourage their children on physical exercise and healthy eating habits. To incorporate this theory into my action I will plan and organize a school centered and family centered program where children and parent will come together. In this program parent and children will get involve in

preparing healthy food so that they can do same when they get to their house. Education program including didactic materials will be given where parent and children are taught what overweight is, causes of obesity, health risk associated with obesity, benefit of physical exercise, By doing this they are well informed on the reason they should make changes in their diets. This program will be organized considering both the low income, average and the rich in mind so that no one will be left behind.

Literature review

In “ Parental predictors of fruit and vegetable consumption in treatment-seeking overweight children” (Vanhala et al., 2010) explored the role of family dietary behaviors in the design intervention of the effective treatment of childhood obesity. The study involved fifty-four treatment seeking overweight and 65 normal-weight 8-year old kids and their parents. The study accessed the children’s and parents consumption of FBV using a food frequency questionnaire. The study used voluntary recruitment mechanism where willing participants were recruited by school nurses to participate in family-based treatment for overweight kids. The cities target includes Oulu, Rovaniemi, Kemi and Ylivieska all in Northern Finland between 2006 and 2007.

The study utilized the antropometrical measurements of height and weight in order to calculate the BMI of each child. Prior to the measurement the parents through the questionnaire provided education levels, marital and health status. These factors especially education forms the basis of this probe and aided in the derivation of a conclusion on the relationship between education and child obesity.

The study majored on pre-school children from 113 parents chosen from four child centers in Ontario in 2003. The study used BMI of the children and relevant questions as per the National Longitudinal Survey of Children and Youth to access physical and sedentary activities. The child feeding questionnaire was used and four factors were derived from parent's belief in respect to feeding responsibilities. This include perceived feeding responsibility, perceived parent overweight, perceived child overweight and concerns about child overweight. The study concludes that parental perceptions and concerns in relation to child feeding and participation in sports and physical activities are directly dependent on the BMI of Canadian pre-school kids. The study is valid for our PICO question in that it derives the associated dependent variables of child obesity. According to this study, obesity prevention is dependent on application of education based initiatives targeted at parents of young kids to increase knowledge on benefits of nutrition and exercise.

Magdalena Safron, Aleksandra Cislak, Tania Gaspar, and Aleksandra Luszczynska carried out a research on the effect of school-based interventions targeting obesity-related behaviors and body weight change. The study used a systematic search of reviews published between 1990 and 2009 by two reviewers, Health Source and PsycINFO. The study collected 2381 papers with three groups of keywords; age of participant, systematic review design and weight-related behaviors. The study investigates the use of school-based interventions and behavioral and family components. The use of family components did not necessarily involved parents enrolled in education classes and as such did not directly apply to the PICO question.

School-based programs indicated in this research involved physical activity and school environmental changes. Therefore the conclusions derived in the study do not have a relation with the PICO question we are investigating.

Lucas C, Carole V. Harris and Andrew S. Bradlyn investigated the relationship between Parental concern and management of childhood obesity. The study used a stratified sample of 1500 parents of children from Kindergarden to 7th grade in West Virginia. The study used interviews from parents chosen in respect to the specific interventions and assessments contained in the West Virginia's childhood obesity legislation. The study used demographic variables such as child BMI, parent BMI, socio-economic status and parent gender. A host of factors were calculated including factors influencing parents concern about child weight, parents' actions regarding child physical activity, and parent's action regarding family diet.

According to Elizabeth McGarvey and et al in the study “ Feasibility and Benefits of a Parent-focused Preschool child Obesity Intervention” probed the parental behaviors that prevent child obesity (26%) in children served with Special Supplementary Nutrition Program for WIC. The study used two WIC sites to participate in nonrandomized and controlled one year prospective study to investigate and access parents self-reported changes in behaviour among preschool kids. The research was conducted in collaboration with WIC staff from Virginia Department of Health and Virginia University faculty members in development of a “ Bright Future in Practice” supervision tool applicable in Northern Virginia. Participants provided a written informed consent to aid in the pre-test and post-test study.

The study used a questionnaire as the sole interview tool to test changes in

physical activity since there was no proven instrument to measure the activity in kids.

The intervention strategies in use included educational groups, staff reinforcement and community reinforcement. The study found that similar intervention strategies can influence both food-related and activity-related behaviour and thus demonstrate the fact that parent's behaviour can promote healthy eating and increased physical activity in preschool children. The study is therefore relevant to the PICO question and is applicable parent scenarios.

Mary . O Hearst, Nancy E Sherwood, Elizabeth Klein, and Keryn Pasch conducted a study to assess parental perceptions of their adolescent's weight status and named it The ECHO STUDY. The experiment seeks to assess the correlates of parental classification of adolescent weight status using parent's self report perception data. The ECHO study examined multilevel factors that resulted to obesity in adolescents.

The methodology used involved 375 parent adolescent dyads recruited from membership of Health Partners health plan in the Minneapolis metropolitan area. The target adolescents must be current HP members in 6 to 11 grade in the fall of 2007.

The study revealed that parents play a major role in the health of their children. It is reported that parents with college education were more likely to underestimate their adolescent's weight status by 31%. Further, the report cited that non-college educated parents were more than 8 times to disqualify overweight adolescents. Parental perception is critical to the health of adolescents. The study is relevant because it underlines the

relationship between parent education and the health status of their children.

Kirsten Davison, Janine Jurkowski, Kaigang Li, Sibylle Kranz and Hal A Lawson carried out a study named “ A child obesity intervention developed by families: result from a pilot study”. The study probes the effects of community-based participatory research in the development of family centered intervention methods for low-income families.

The study involved 423 children and their families between the age of 2 and 5 in Five Head Start centers in New York and 154 families for evaluation.

The study was conducted in 2009/2011 and involved the development of a pre-post cohort design that contained (1) letters reporting BMI, (2) communication campaign, and (3) nutrition counseling sessions and (4) parent-led programs to improve communication skills, child healthy lifestyle awareness, media literacy and conflict resolution.

The results indicated that children indicated improvements in rate of obesity after intervention period. Trends in physical activity, TV time, and dietary intake improved. In conclusion, the study revealed that parent’s participation in intervention programs increased self-efficacy and promoted healthy living in children. The study is relevant to answer critical factors in the PICO question.

L. Chan, A. M Magarey, L. A. Daniels are the authors of “ Maternal Feeding Practices and Feeding Behaviors of Australian Children Aged 12-36 Months”.

In this study, the authors explore the parent’s perception of the eating behaviors and related feeding practices of their young children.

Randomly chosen mothers with children ages 1 and three years in South

Australia and obtained from central state database were invited to complete a questionnaire. The study show that most parents are afraid about the amount of food given to their children with 15% indicating lack of vegetables in their kids food in the last 24 hours. 80% of the mothers did not promote healthy feeding habits thereby calling for a need to cultivate a culture of healthy feeding preferences and positive practices.

The method used in this study had approval from Flinders University Social and Behavioural Research Ethics Committee and Women’s and Children Hospital Research Ethics Committee. The research did cover the most crucial aspects of child feeding and greater percentages (60%) of the sampled mothers were confident of the feeding practices. However there was cause for alarm for the remaining portion in respect to dietary quality and exposure to fruits and vegetables. The high exposure of non nutritive energy dense foods and limited vegetables has an impact on obesity.

Thus, the research is significant in that it can be used to answer the PICO question in focus.

Comparison of parent cardiovascular knowledge, attitudes, and behaviour based on screening and perceived child risks is a research done by Lesly A Cottrell, Valerie Minor, Emily Murphy and Eloise Elliot. It involved questionnaire reports and universal screening procedures obtained for 244 children in 5th up to 9th grade. The Rural Health Education Partnership and the Coronary Artery Risk Detection in Appalachian Communities at West Virginia University under the Support Department of Health and Human Resources. The screening featured students in the county schools where their parents were requested to fill questionnaires using a data obtained

from pedometer device used on the child for a period of 6 weeks. The procedures involved were approved by the IRB for The protection of Human Subjects at WVU.

The conclusion of this work noted that parent's ignorance (60%) about children's participation in health screenings and prevention programs and intervention is the reason to blame for increased cardiovascular risks in children. Such activities as overweight indicate a child's unhealthy condition which if reported by the parent, can lead to prevention of cardiovascular diseases. The research in extension indicates that parent's enrolment in educational classes can improve their detection skills of up normal kids thereby resulting in better diagnosis and prevention.

Parental Perception on the Efficacy of a Physical Activity Program for Preschoolers is a research by Laura Bellows et al. The group used Four Colorado Head Start centres under the banner Mighty Moves: Fun ways to keep families active and healthy. Research was approved by IRB Colorado State University. Telephone interviews were used to request for consent to participate. 51 completed surveys (52% response rate) were completed and returned. The Mighty Moves program is a social networking framework that has an educational program tailor made to the needs of the audience. The program is successful in increasing physical activity within the home environment for the parent and the children in order to prevent obesity from a tender age.

The Q-Methodology research performed by Noori Akhtar Danesh among other from four universities in Canada studied parent's perception on the causes of obesity among children. Data was sourced from clinic records of

well baby checkups. 33 parents were used in the study classified according to two groups; confident in delivering health nutrition and family physical activity focused.

The research concludes that parents differ in the causes of obesity with 60% citing nutrition and 30% citing physical activity. The former did not identify obesity as a barrier to physical activity.

Eric Hodges “ A primer on early childhood Obesity and Parental Influence” discussed the impacts the parents impart on their children’s eating behaviors and physical activity. The paper provides a synopsis of parental influence on etiology of early childhood obesity with focus on factors such as BMI, and SFT. The study highlights that 77% of children with BMI greater than 95th percentile remain obese as adults. It is not relevant to the PICO question in that it does not probe the effect of parent education programs on child’s nutrition and physical activity.

The letter to the Editor by Danielle Landry talks about the clinical role played by nurses in the detection of obesity. It also talks about the approaches used to extend the knowledge to parents to better their understanding of obesity and ways to prevent it. The article is relevant to the PICO question since training of parents in relation to obesity is essential.

Nydjie Payas in his research explored the relationship between mothers BMI, family factors and concern for child’s weight. It uses a cross-sectional analysis of 47 mothers of school-aged children. Most African-American Women (52%) were severely affected by obesity leading to a conclusion that they were more concerned about their children’s status. In conclusion, the results

show that family community has an influence on the likelihood of child obesity. The study is, therefore relevant to the PICO question.

Evaluation Plan

There are many tools for weight measurement status that can be used to evaluate the progress and success of the proposed solution of child obesity. Overweight status and obesity can be classified using a person's body mass index (BMI), it is used measure for weight to height (Nishida, 2004). Nishada further points out that BMI can measure weight for both sexes and across all the age group. WHO (2006), gives a guideline that a BMI score equal to or more than 25 for an individual 14 years or older is considered as overweight while a score equal to or more than 30 is considered as obese. For children, having a BMI equal to or above 95th percentile on the chart growth of disease control is classified as obese or overweight. An evaluation based on the centre of disease control growth chart that gives a percentile of 85th and 95th are at risk of becoming obese. Danielzik Sandra et al in his research “ impact of parental BMI on the manifestation of overweight 5-7 year old children” investigate the impact of parental BMI on the effect of the overall manifestation of 5 to 7 year olds. The study used 3306 children and their parents in Germany. The nutritional state of child in respect with the parent was compared. The parents BMI showed a weak correlation with the child. 7. 6/6. 3 multivariate regression value for boys and girls was recorded for a child with two obese parents.

Since BMI measurement tool may have challenges, another tool will also be incorporated to overcome those challenges. Waist-to-hip ratio (WHR) is a tool used to measure obesity and increased risk of obesity. Goran et al., (1998),

argues that WHR measure provides more accurate and useful results compared to BMI tool. A high increase in WHR is associated with fat distribution hence increased risk of health complications such as increase blood pressure (Raphael et al., 2007). Taylor et al., (2000) is the recent study which has criticised WHR, pointing out that it is highly age dependant hence not suitable for measuring obesity in children. It can be concluded that there is no perfect way of measuring obesity status in children hence this study will combine the two measurement tools to obtain accurate results.

Dissemination Plan

Dissemination is an essential part in any project. The manner in which results and observation of a study are conveyed out to the stakeholders determines the success of the project. The process of promoting and explaining the proposed solutions will require three months to disseminate. This would allow for sufficient time to schedule presentations with all groups comprising the audience. The intended audience for the introduction of the education program on nutrition and exercises for change at risk of obesity is the parents, teachers, the senior administration team, the medical staff, the nursing department directors, and the professional nursing staff.

Conclusion

Childhood obesity is an issue and challenge that has long-term effects on children in their childhood. This calls for the nurses and all hospital staff to help the child come out of this condition successfully. Health professionals should be involved in disseminating useful information to families on cautionary measures that can be taken to avoid or reduce obesity. The

degree and extent of childhood obesity should be an issue of concern to nurses. They should come out with strategies that will help children deal with obesity. This should be in the context of the family, community and school. They should come up with programs that will be followed by families and teachers in order to reduce this pandemic. The staff who work in hospitals should make use of the evidence that they get to work on the problem that obese face. Nurses should be on the forefront in addressing this issue as they are the ones who interact with the family in their line of duty. They are also in strategic settings where they interact with community settings so that they are in a position to prevent and manage overweight conditions amongst children. In all these, it should be known that childhood obesity is a serious problem that should be prevented using all means possible.

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Appendix evaluation sheet