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OBESITY AND ITS PREVENTION IN CHILDREN 6 -12 YEARS BY  
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## OBESITY AND ITS PREVENTION IN CHILDREN 6-12 YEARS BY PARENTS

Overweight in childhood and adolescence is a vital community health issue because of its tremendously increasing widespread and related adverse medical and social inference . Last three decades, obesity or overweight has more than doubled across the world, an estimate of 43 million children younger than five years are obese or overweight (WHO, 2010). Therefore this project focuses on finding evidence based information on prevention of obesity and overweight in children and adolescents.

There are so many causes of obesity; biological, behavioral, social, environmental, and economic factors. According to the ecological systems theory (EST), childhood overweight is influenced by individual, family, and community factors. Studies also show that family characteristics and parenting styles shape children's activity patterns, dietary intake, and obesity risk.

The aim of this project is find effective ways of preventing overweight and obesity in children. The task is to find evidence-based information about prevention of obesity in children that will be a teaching material to Turku University of Applied Sciences on ways of preventing childhood overweight and obesity.

### KEYWORDS:

obesity, knowledge, exercise, , parents, prevention, children, education.

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## LIST OF ABBREVIATIONS (OR) SYMBOLS

BMI	Body Mass Index
WHO	World Health Organization
NCDs	Non Communicable Diseases
RNAO	Registered Nurses American Organization
NUTR EDUC BEHAV	Nutrition Education And Behaviour
EST	Ecological Systems Theory

## 1 INTRODUCTION

Obesity is a medical condition in which excess body fat has accumulated to the extent that it may have an adverse effect on health. A child's weight status is determined using an age- and sex-specific percentile for BMI (Body Mass Index), rather than the BMI categories used for adults, because children's body composition varies as they age and varies between boys and girls. Hence for children, obesity is defined based on age-sex-specific 95th body mass index (BMI) percentiles, while overweight, based on the 85th percentile (Youfa et al, 2013). Few extra pounds don't suggest obesity. However they may indicate a tendency to easily gain weight and need for changes in physical activity and / diet. Generally a child is not considered obese until the weight is at least 10% higher than the recommended for the weight and height. ( Reilly, 2009.)

Initially it was perceived a challenge related to developed countries but the fact is obesity has now become a major health concern around the globe. The key point concerns rates of overweight and obesity among children which is rising in the society in all continents. Obesity has doubled over the last three decades and more measures are not put in place to curb the problem ( Youfa et al. 2013).

Overweight in childhood and adolescence is a vital community health issue because of its tremendously increasing widespread and its related adverse medical and social inference. The consequences of obesity commencing from childhood will definitely pave the way to earlier death and even physical or mental illness in adulthood. Children who are obese and overweight often remain obese into adulthood and the side effects are cardiovascular diseases at a younger age and noncommunicable diseases (NCDs) like diabetes. Numerous noncommunicable diseases arising from obesity, their imminence depend entirely or partially on the age of onset and on the continuance of obesity. Obese children depict both short and long period health consequences. These children are also affected psychologically as some have low trust in themselves or self-concept, negative body image and depression which could also be as a result of teasing from their

peers. Much effort and commitment will be required to regain healthy weight after becoming overweight or obese.(Veugelers, 2005.)

In the area of childhood obesity prevention, it is important that a combined approach of exercise, behavioral changes that include a decrease in sedentary activities, social support, healthy nutrition knowledge, and parental support considered as vital components so as to prevent problems that children would encounter in their lives later that results from obesity. (Angela, 2004). herefore this project focuses on finding evidence based information on prevention of obesity and overweight in children and later write guidelines for nurses used in educating parents since they play a greater role in influencing children ´s behavior.

## **2 LITERATURE REVIEW**

### **2.1 2.1 Development of children 6-12 years**

As children transition from preschool-age to school-age takes place, they may develop eating habits and leisure-time patterns that may not meet current recommendations and may contribute to childhood obesity. Also as they grow from grade-schoolers to preteens, there continues to be a wide range of "normal" regarding height, weight, and shape. (Al Hazzaa, 2008.)

Kids tend to get taller at a pretty steady pace, growing about 2.5 inches (6 to 7 centimeters) each year. When it comes to weight, kids gain about 4 to 7 lbs. (2 to 3 kg) per year until puberty starts. This is also a time when kids start to have feelings about how they look and how they're growing. Some girls may worry about being "too big," especially those who are developing early. Boys tend to be sensitive about being too short. Child's growth pattern is largely determined by genetics. Pushing a child with "short genes" to eat extra food or greater than recommended amounts of vitamins, minerals, or other nutrients will not increase his or her height and may lead to weight problems. (Hollie, 2009.)

A very important part of growing up is the ability to interact and socialize with others. During the school-age years, parents will see a transition in their child as

he or she moves from playing alone to having multiple friends and social groups. While friendships become more important, the child is still fond of his or her parents and likes being part of a family. While every child is unique and will develop different personalities, the following are some of the common behavioral traits that may be present in a child: cooperates and shares, jealous of others and siblings, likes to copy adults, Likes to play alone but friends are becoming important, enjoys taking sugary food and eating always freely. (Jianghong, ngelina & Linda, 2012.)

At this age children also find it very important to be accepted by the group. They are sensitive to being left out. They compare their physical size and abilities with friends. This is especially true of boys. They seek adult approval, need encouragement, recognition, praise, patience and adult support. Boys play only with boys. Girls play only with girls and act more like girls. Children are beginning to recognize the rights and desires of others, appreciate such social values as honesty and team work, and are able to assume some responsibility. They have a need for privacy from parents and family, but will stand up for them, especially away from home .(Patrick & Chantelle, 2009.)

Frequent physical complaints (such as sore throats, tummy aches, and arm or leg pain) may simply be due to a child's increased body awareness. Although there is often no physical evidence for such complaints, the complaints should be investigated to rule out possible health conditions, and to assure the child that the parent is concerned about his or her well-being. (Birch & Fisher, 2007).

## **2.2 Causes**

### **2.2.1 Social and cultural factors**

The family is where the greatest cause of obesity has been identified and noted to be the root of the commencement. The changing world with new technology and advance life has made an impact in so many ways. Majority of the families will go for ready packed food which is cheap and spend less time in food preparation but run for other businesses looking for money. Research reflect that the majority

of fast foods are excess in fats, has preservatives and are very low in vitamins. The much use of these foods clearly lead to obesity and related related diseases (Gunner, Atkinson, Nichols & Eissa, 2005).

Currently the majority of parents in families are both working, mothers in particular, work eight hours or more in a day. This clearly highlights that less time is spent on preparing healthy meals at home. The parents come exhausted from work and tend to have less time for preparing healthy meals and spending an hour or more doing exercises with the children. A study in America concluded that there is a connection between working mothers and obesity in children. Children aged from 5 to 7 years old and their mothers work full-time are more likely to have excess weight problems (physorg.com, 2007).

The demands caused by working life and the fast changing world has increased, forcing parents neglect the fact of good parenting that is providing healthy food for their children and ensuring that they have sufficient physical activities. On the other hand evidence from studies carried out in America has shown that many non-working parents tend to have overweight and obese children. Hesketh, Waters, Green, Salmon and Williams (2005), identified that this could be attributed to the parents' insufficient knowledge about healthy diet. They prefer to prepare meals which are not recommended by health professionals for growing children. However, some authors argue that it is not about parents having lack of knowledge but that the lack of resources for purchasing healthy meals has generated to the problem. These parents lack enough money to buy foods that are sufficient for young children's health dietary needs. (Gunner, Atkinson, Nichols & Eissa, 2005.)

### **2.2.2 Demographic factors**

There is a confirmed research that the closest people with bad habits greatly induce the obesity in childhood. Families are not in a position to purchase healthy foods as healthier foods are too expensive compared to those that are unhealthy. Children in worse neighborhoods have no time to spend playing outdoors because of unworthy playground facilities. Safety is another factor because



parents do not allow their children from playing outdoors due to high criminal acts. These challenges appear to be more common in America and the United Kingdom where most families who live in poor neighborhoods are from Hispanic, Spanish and African backgrounds. A question of concern was raised if genetic inheritance play a role in obesity. Many authors have found out that overweight and obesity is much more common in some ethnic groups, especially in the populations mentioned above. Thus, ethnicity must be considered when analyzing the Body Mass Index. Genetic disposition was clearly identified to be associated with obesity. (Clement, 2006.)

Some studies conclude that a person may possess a gene type which could make them more prone to elevated weight. This may be apparent when these affected are exposed to an affluent lifestyle. However, a significant result on weight and obesity susceptibility will become apparent when these individuals practice sedentary lifestyle with no physical activity and take high-calorie foods. Likes of the aboriginals in Australia, the Pima Indians in Arizona, the 10 Maori in New Zealand and the American Samoan in an urban environment (WHO, 2010).

### **2.2.3 Lifestyle**

Several unhealthy lifestyle factors can contribute to obesity. Sometimes children tend consume more food and beverages which are not utilized appropriately to gain energy. They may eat large portions of foods high in sugar and, or energy-rich foods. Hence, higher energy intake than energy expenditure which may result to weight gain in children ( Bellisle & Rolland-Cachera, 2007.)

According to Chung & Che, 2009 Children nowadays lack physical activity which plays a vital role in obesity. Energy input and output should be evenly proportional. As a result of inadequate physical activity among children, calories are not used properly increasing chances of obesity. Parents play a big role in promoting physical activity on their children. It was found out that parents with higher educational qualifications promoted a good environment to their children with healthy lifestyle habits

Sedentary lifestyle is another important factor for obesity, since many children spend most of their time in front of television, playing video games, and watching computers. They spend most of their time sitting without any physical activity and even eat snacks while watching television. All these unhealthy lifestyle factors are co-related with one leading to another. When children spend more time on sedentary lifestyle and at the same time consuming high energy dense food with less physical activity, obesity chances increases. Children may be influenced to make unhealthy food choices through advertisements on television. Those unhealthy food choices could result in weight gain and even obesity (Bellisle & Rolland-Cachera, 2007.)

## **2.3 Risk Factors**

### **2.3.1 Genes**

The amount of fats that is stored and distributed in the body is greatly affected by the genes. Genetics too play a key role in how efficiently and effectively the body converts food into energy and how it burns calories during the exercise. Even when someone has a genetic predisposition, environmental factors ultimately make one gain more weight. Obesity in many cases tends to be realized in families just because of genetics. Members of the same families have similar eating, lifestyle and activity habits. If one or both of the parents are obese, the child stands at a risk of being obese. Copying the parents' behavior by the children leads them to the same health state if they are obese. (Youfa et al. 2013.)

### **2.3.2 Dormancy**

If the child is not very active, the body will not burn as many calories as required. With a sedentary lifestyle, the child can easily take in more calories every day than being burn off through exercise and normal daily activities. In the developed countries especially western world, Children practice less exercise which makes them less active. Reseachers like, Simmons, Collins and Kremer (2008); Eisa, Gunner, Nichols and Atkinson(2005), insist that dormant lifestyle is connected to

children's dominant use of computers, boredom, television viewing and lack of inspiration. Even though physical education is done in schools, the time spent in physical activities is not adequate.

### **2.3.3 Socio-economic factors and Diet**

A diet that's high in calories, lacking in fruits and vegetables, full of fast food, missing breakfast, and laden with high-calorie beverages and oversized portions contributes to weight gain. The daily consumption of such food highly increases the chances of being obese in children. (Vanhala et al. 2009.)

Soft drinks containing sugar are a risk factor too. Candy and desserts also can cause a child to gain weight weight gain. Foods and beverages like these are high in sugar, fat and calories.

Foods that does not spoil quickly such as frozen meals, crackers and cookies often contain a lot of salt and fats. These foods are often less expensive or an easier option than fresher, healthier foods. In addition, people that live in a lower income neighborhood may not have access to a recreation facility or other safe places to exercise. The children will spend most of their time indoors having no active plays. This makes them gain weight easily and later develop obesity. (Veugelers & Fitzgerald, 2005.)

### **2.3.4 Family Annals**

If a child comes from a family of overweight people, he or she may be more likely to put on excess weight, especially in an environment where high-calorie food is oftenly available and physical activity is not encouraged. Some children overeat to cope with problems or to deal with emotions, such as stress, or to fight boredom. Their parents may have similar tendency which children adapt easily. If the parents cannot control the child's access to high calorie foods; the end result will obviously be overweight that leads to obesity in the long run.( Vanhala, Korpelainen & Tapanainen, 2005.)

### 3 PREVENTION

#### PARENTAL INSTIGATION ON OBESITY

Authors such as Hyunjae (Jay 2011) and Green, Riley & Hargrove 2012 have reported that parents can help prevent their children from gaining unhealthy weight by providing support for healthy eating and physical activity, or by modeling of activities or eating behaviors. Parents who eat healthily and are physically active gives a good example for their children to follow.

According to Isabel & Nain 2012, children are easily influenced by many things but none stronger than parental influence. Parents determine growth and development of their children (O'Connor, Watson, Baranowski & Giardino, 2013). During the early years of a child's life, parents are usually their children's very first playmates. Parents have a direct role in providing experiences that inspire and encourage the child's control of food intake (Reinaerts, de Nooijer, Candel & de Vries, 2007). Many obesity studies mention that parents play a big task in instigating their children's health behaviors from toddler to adolescents.

#### 3.1 Parents Inspiration

Studies on parents and children conducted have revealed that children of overweight parents are also overweight. The parents using unhealthy foods tend to have children who eat unhealthily too (BuddGeraldine, Payas, & Polansky, 2010) Parents who are physically active tend to have active children as well being dormant. These discoveries indicate that parents have a very strong instigation on their children and that parents' influence a lot on food selection, their modeling of healthy eating practices, and their level of physical activity and modeling of dormant habits are all influential in their children's longlasting life growth culture that results to normal weight or to obesity. It is imperative for parents to lead in healthy eating and offer variety of healthy foods especially at around preschool age, when children dislike new foods. (Brown & Ogden, 2004.)

(Payas, BuddGeraldine & Polansky, 2010) identified in their research that mothers highly influence their daughters' eating habits via their own eating

patterns and their food choices. This was also evident in another study by Elder, Arredondo, Campbell, Baquero, Duerksen, Ayala, Crespo, Slymen & McKenzie, 2010. These authors identified the association between parental BMI's and their children's obesity. Their findings revealed that increases in parental Body Mass Indexes had high association with obesity.

Researchers such as Elder, Arredondo, Campbell, Baquero, Duerksen, Ayala, Crespo, Slymen & McKenzie 2010; DIANNEN 2005 all concur that the home environment is an important setting in relation to molding children's physical activity behaviors and eating habits.

According to O'Connor, Watson, Baranowski & Giardino 2013, children are heavily dependent on their parents from the very beginning than anyone else. Therefore, parents are responsible in choosing or selecting the kind of foods the child is supposed to consume and how it is prepared, when and where foods are eaten, which foods are restricted and in the amount to be taken. These writers expound that since children's behavior is often shaped by observation and adaptation, parents must live and support a healthy way of child development.

### **3.2 Parenting skills and knowledge**

In abetting a healthy lifestyle and educating children the best eating norms, it is mandatory for parents to possess smart parenting proficiency (Phillips 2012). Possessing appropriate parenting skills, plays a massive part in the interventions for childhood overweight and obesity - as promoting healthy lifestyle, monitoring food intake and prohibiting unhealthy snacking is something that parents have the capacity to control better and evade (Wardle, Carnell & Cooke 2005). The degree of parental control over early feeding has been associated with a child's eating behaviors. Comprehending the sources of individual differences in feeding practices is critical, given the task of parental feeding practices in establishing children's eating habits. Parenting styles range from authoritative, authoritarian, permissive and neglectful.

Supporting the child as well as parental praise are pivotal in long-term maintenance of normal weight status or weight loss.

### **3.3 Familial Attributions**

It may be very difficult for parents who are obese themselves to give support and guidance to their children in order to prevent the development of obesity. There have been several studies that have identified parental obesity or high BMI as one of the numerous triggers of a child's obesity. A survey conducted by Payas, Polansky and BuddGeraldine(2010) identified that elevated parental body mass index was associated with obesity in children.

Candel, Reinaerts, de Nooijer and de Vries (2007) too identified that the weight of the parents being one of the strongest correlate of a child's weight. Some researchers have proposed that this may be genetically related but numerous studies have confirmed that this is highly attributed to parents' way of eating and dormant way of life that has been linked to their children. As children grow, they can be instigated by friends and other factors but parental attributions remains one of the dictating factors in determining the ways in which the child will develop and grow.

Due to the enormity of the obesity epidemic, concerns were raised about where efforts should be focused in order to most effectively address this predicament. As documented in the literature, a variety of intervention methods have been performed globally in attempt to reduce and prevent childhood obesity. For a few decades, schools have been the primary setting for obesity impediment plans in children but some of these efforts have generally been found to have only limited breakthrough. Children persist to grow fatter, heavier and unhealthier. It is even more alarming to see the booming numbers of overweight and obese children who have not even attained their age to school. Therefore, the main focus should be turned to the child's more immediate environment which is home.

Several researchers have reported that obesity prevention must be commenced at a very young age. In much as family influences are the key determinants of the

immense incidence rate of childhood obesity, preventive approaches are far more effective when they are more focused on the home environment. The parents, most particularly, can make all the undertakings in the prevention and treatment of obesity in children. Evidence suggests that preventive schemes have a higher success rate when parents are involved in the system. Directing children's eating and physical activity behaviors must begin at home because parenting instigates different aspects of a child's behavioral reinforcement.

Negative outcomes were identified in necessary acts that only involved the child alone (World Health Organization, 2010). In the sample of community and school obesity prevention plans tend to have short term encouraging results when there is limited or no support and cooperation from parents. (Arredondo, Baquero, Crespo, Slymen, McKenzie and Campbell 2010) reiterates that it would be more sensible to focus prevention on the younger group because obesity is most challenging to treat or control the case of obesity. Prevention must commence as early as it can be evaded, when health and nutrition plan can shape good dietary norms in order to avert elevated weight gain throughout the lives of people.

## **4 PARENTS ROLE ON OBESITY PREVENTION**

### **4.1 Knowledge on effects of obesity**

In order to bring up healthy children, parents need to be aware of adverse effects of obesity and importance of healthy lifestyle. Parents play a big role in obesity prevention as many of studies indicated so as it was found that when parents have knowledge on healthy nutrition and healthy lifestyle, childhood obesity prevention is boosted. Prevention of obesity entails many factors to be taken into consideration since knowledge on healthy nutrition and balance on physical activity and healthy lifestyle in general is require to obtain optimal result. Hence educating parents about outcomes on unhealthy lifestyle is essential. As parents are considered to have a central role in preventing obesity, the appropriateness

of their actions and practices regarding the prevention of obesity is of utmost importance. Several studies have reported that parental education on lifestyle change and healthy nutrition is effective in the prevention of childhood obesity. According to (Diannen 2005), parents can help their children engage in more healthful eating and physical activity behavior and feel better about themselves by role modeling healthful behavior, providing an environment that makes it easy for their children to make healthful choices, focusing less on weight and more on behaviors and overall health.

#### **4.2 Fruits and Vegetables**

Parents need education on health benefits of having fruits and vegetables in their meals diet( O`Connor et al,2013). When they make those foods available at home, children will learn to eat them increasing their intake. Parents should organize regular meals that have fruits and vegetables. During mealtime, parents need to act as example by eating these food as children would be positive about eating too. Parents can mold their children`s habits related to eating from the beginning by proving a healthful environment by encouraging consumption of fruits, vegetables and also other nutritious food.(Veugelers and Fitzgerald, 2005.)

#### **4.3 Balance diet Promotion/ High fat and sugar Reduction**

Parents are supposed to follow the food recommendations during preparation of meals for children. They should regularly serve enough proportion of healthy meals and reduce consumption of fatty food. Limit availability of high-calorie and low-nutrient foods- this is to help children understand that sweets and high fat treats (for instance cakes, candy, cookies) are not everyday foods. Let them have those treats occasionally and furthermore avoid labeling food as bad or good as all food in moderation can be part of healthy diet. (Hudson.ce, 2008.)

#### **4.4 Dormant behaviours reduction**

Parents need to reduce the time children spend on sedentary behaviors such as watching television, playing computer games to the recommendation of



maximum of 2 hours per day. Watching television is more strongly associated with obesity than other sedentary behaviours. This is because watching television, reduces energy expenditure by limiting time that children spend doing physical activities, leads to increased energy intake because it tends to lead to snacking especially of junk food enticements. Furthermore, watching television has even less energy expenditure associated with it than other sedentary behaviours such as reading and writing. (Tremblay et al. 2011).

#### **4.5 Physical Exercise**

The improvement in technology, rural-urban migration, increasing insecurity, substandard or lack of enough playground equipment have led to reduced rate of young children playing and duration also. However, these should not prevent parents from being role models to their children by showing good example and encouragement by being physically active themselves. During choice of physical activities, parents should put into consideration suitability of the activity to child's age, impact on child's ability and confidence and moreover it needs to be pleasurable to the child (SIGN, 2010).

Healthy children with appropriate weight must engage in moderate or vigorous exercise for at least one hour each day. This is evident by the Scottish Obesity Prevention Guideline (2010). Walking, swimming, running and many other types of exercises can help keep normal weight. The space for physical activity has to be available in home environment by the families and any other nearby persons. (Green, Hargrove & Riley, 2012.)

## **5 AIM AND TASK**

The aim of this project is find effective ways of preventing overweight and obesity in children.

The task is to find evidence-based information about prevention of obesity in children that will be teaching material to Turku University of Applied Sciences on ways of preventing childhood overweight and obesity.

## 6 EMPIRICAL

Parents can help prevent childhood overweight and obesity by modelling healthy behaviours, educating and guiding their children towards making healthy food choices and physical activity. Nurse could fill in the gap of parents knowledge deficit and work together to prevent childhood obesity.

### **Recommendation for nurses to family or community based obesity prevention intervention**

- ✓ Support efforts to preserve and enhance parks as areas for children's physical activity
- ✓ Encourage parenting styles that encourages increased physical activity and reduce sedentary behaviors
- ✓ Utilize social learning in theory in teaming with parents to teach them ways of engaging their children in play that promotes physical activity e.g. dancing
- ✓ Be able to evaluate parent's readiness to accomplish lifestyle changes necessary for preventing obesity including their parenting style
- ✓ Use counseling techniques to engage parents in communication about possible behaviors that can lead to their children's obesity, advise them on steps to take, listen to their responses, and reflect on related outcome and challenges.

Prevention strategies aimed at family level are essential in influencing dietary habits of children

Interventions to prevent childhood obesity should begin at tender age even before establishment of dietary patterns

Aim at individual families

## **Nursing skills required for childhood obesity prevention**

There are many critical factors that nurses need to consider in childhood obesity prevention at family level. In recognition of changing conditions to improve health in best circumstances is challenging. The nurse will need to assess the level and type of preventative method most appropriate for the family, child, socio economic status, culture, among others. It can be done as a part of health promotion or protection strategy at family level or community level. An example of health promotion is enrolling children to a dance club to increase their physical activity while example of protection is adoption of a country ordinance that bans the use of trans fat in restaurants.

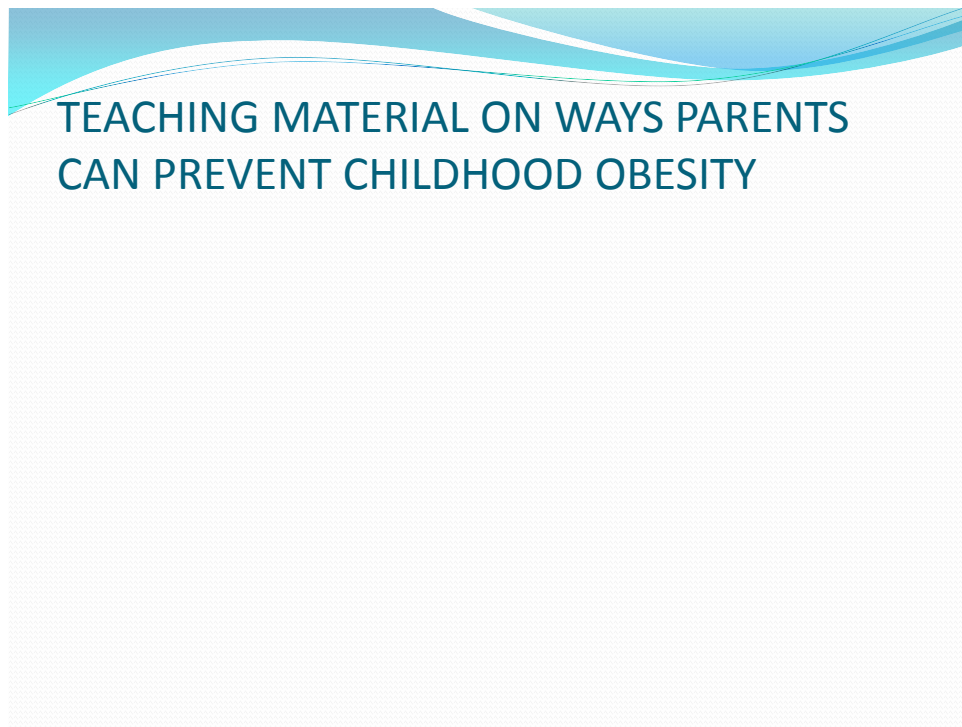
**Advocacy skills.** Nurses need expansion of their abilities to advocate for change of policies at national or state level that will impact the changes of conditions in the society. These changes include regulatory actions that would impact the parents and children's in making healthier choices on nutrition and physical activity. Policy is a great tool in advocating for changes in conditions that contribute to obesity, since many factor that lead to such as poverty, and poor access to nutritious food health disparities can be best approached from health determinants perspective.

**Collaborative leadership.** It is an essential skill regardless of whether the change is intended at individual, family or community level. Leadership at the community level takes a special approach since community participant are essential for assessing health issues, impacts of those issues in their community, and planning approaches that can be met and accepted by the community members. Collaborative leadership help a group establish shared leadership, trust and insight into change required by the community and the capacity to use self reflection on how one's own behavior impacts on others.

**Social marketing skills.** In social marketing approach nurses need to understand what target audience i.e. parent and child is willing to give up or

modify in terms of behavior in order to adopt the new behavior for the previous lifestyle.

### **Guidelines for nurses to parents**



## **7 DISCUSSION**

Family-based approaches are recommended in curbing obesity since there is continuing evidence between overweight and obesity in children and parental overweight and obesity. Also many young people are unable to make changes without support from an adult family member. (O'Connor et al. 2013.) Families need to be supportive within our society, which works towards the development of a healthy weight and a positive body image in children. However, families cannot do it on their own without support from broader society. (Diannen, 2005.)

In childhood obesity prevention, the focus has been on mainly nutrition, diet and physical activity. This is because it is important in regards to public health. (Jianghong et al. 2012.)

In facilitating the basis for behavioral changes in prevention of obesity in children, home setting is considered best (McGarvey et al. 2004). As foreseen, prevention strategies needs involvement of not just parents but nurses also. Education of the children is one key factor that should be taken into account (Isabel &Nain, 2012).

With data collected from this project, more plan on research about children`s obesity prevention or health issues would be faciliated or made easier. This will be valuable also in establishing efficient nursing interventions and enlightening programs focused on childhood obesity. Although enlightening parents on obesity issues is one of the many potent nursing interventions, nurses have been seen to be a bit reluctant in enforcing this plan, partially due to the fact that parents have a right to raise their children according to to their own standards and expectations.

According to Nursing Guidelines of RNAO (2009), to able to converse widely obesity dangers and approaches to intended persons, being well-informed is a prerequisite for nurses. Therefore the need of nurses` relentless in adding more knowledge and training in specialization of certain skills, for instance developing guidance and teaching skills.

Success on parents goals will be reached when there is good collaboration between nurses and parent. This can be achieved through nurses motivation to families in making healthy choices. Nurses acknowledged during study conducted by Story et al. (2002,) that they have a great role role to play in obesity prevention but their limited knowledge on this subject hinders their effectiveness. Further training was an issue raised which is meant to aid nurses in effectively providing knowledge to parents and caregivers in obesity prevention.

## **8 CONCLUSION**

If excess body weight and unhealthy eating are not watched closely at an early age, obesity could continue to adulthood along with many health problems to adulthood. These health problems include; diabetes asthma, high blood pressure, heart diseases and some form of cancer. Psychological effects such as low self esteem and depression not forgetting social problems for instance bullying, discrimination and stigmatisation are serious issues likely to be faced by overweight and obese children. This outpoints why it is really very necessary to identify and try to curb the problem during childhood.

It is of great concern that obesity should be prevented as from an earlier age, a collective responsibility of involvement of both parents and nurses is required. Parents especially have a crucial task in the prevention of overweight and obesity. They should know that they have to offer support and promotion strategies for families to face and handle the challenge of overweight and obesity. Nurses can guide and educate families in regard to healthy lifestyle, build good eating habits, encourage physical activities and practice best parenting lifestyle. Therefore, to have a breakthrough with their approaches; practice guidelines, comprehend the triggering factors and health results of obesity, and be well conversant with the knowledgeable in order to realize effective obesity prevention efforts.

### **ETHICAL CONSIDERATIONS**

Nurses play a key role in educating parents about what obesity is and how it relates to the growth curve. This education should start when the child is born. Nurses can educate parents at well-child visits, health fairs and parenting classes. Nurses should build confidence between them and parents as it is an ethical fact for them to gain trust in the community.

Nurses can offer educational guidelines to parents and children by providing nutritional advice; through weight management programmes, offer strategies for decreasing caloric intake and increasing physical activity. Nurses' actions always leads to a health environment through their professional approach to parents . Nurses should work with all members of the multidisciplinary team in addressing

childhood obesity as it is a major health issue with long-term morbidities. These are a vital nursing ethical issues which should be taken into account by nurses while offering education to parents about obesity prevention in children.

## **RELIABILITY**

This project relied on already published scientific research articles, which has undergone analysis and scrutiny and which are available in scientific databases, which means measurements done followed already approved standard scales about obesity in children. The research articles represented were drawn from almost all the continents in the world. The references for the data used are acknowledged and documented in the reference page.

The limitation of the project is that not all the articles can offer all the information for total prevention of obesity and it is difficult to get to know how parents lifestyle can be completely changed.



## 9 SOURCES

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