**Obesity in High School Students**

**Quantitative Article on Obesity in High School Students**

The article "Physical Environmental Correlates of Childhood Obesity: A Systematic Review," by Genevieve Fridlund Dunton, Jesse Kaplan, Jennifer Wolch, Michael Jerrett, and Kim D. Reynolds is a primary quantitative article that focuses on how community environments as well as neighborhood, play an integral role in contributing to obesity levels among the youth.  The researchers of the article used fifteen quantitative studies in the article.

**Introduction**

The prevalence of the youth that is overweight has significantly increased to approximately 32% by the year 2006. This presents serious health consequences to overweight youth as they face the risk of developing type 2 diabetes, psychological issues as well as cardiovascular problems. Additionally, overweight youths are more likely to be overweight adults as compared to normal youth. Therefore, the researchers stated that the importance of understanding of the issues behind childhood obesity citing that it is a vital factor as it will help in the process of reversing the disconcerting trends (Dunton et,al., 2009).”

**Review of Literature**

There are several reasons that have been used to explain the increase in childhood obesity in the United States.  A decrease in physical activity among the youth has led to an increase in obesity among students.  Moreover, there is a possibility that genetic factors play a role in obesity levels in students.  Such behavioral trends have been credited to neighborhoods as well as community environments that encourage the use of inactive forms of transport and leisure among the youth. In Davison and Lawson review, when there is unlimited access to recreational facilities and school, sidewalks and controlled intersections are some of the factors linked to youth physical activities. Other additional factors included in their review were destinations and public transportation. Further in their review, home and school environment was linked tio high activity levels among children (Dunton et,al., 2009).”  The article seeks to deliver a systematic review of quantitative based research investigating how created and biophysical environment influence on obesity and overweight in adolescents and children.

**Discussion of Methodology**

The researchers made use of significant quantitative studies in the examination of the correlation between built and biophysical environment and their impact on childhood and adolescent obesity. The quantitative studies used were identified through the use of Geobase, PubMed and PsychInfo.  The searches were based on the use of certain keywords which included built environment, obesity, and population density among others.

The inclusion criteria followed the following characteristics. First studies needed to get the measurement of one or more features of built or biophysical environments. Secondly, it required to get the actual BMI, the overweight, and any case of obese. Thirdly, the approach should have been both quantitative and analytic. Fourthly, in reporting results for youth needed separation based on age (ages 0-18 years). Fifth, all reports require presentation in English. Lastly, publication in a peer-reviewed journal had a deadline of up to May 31, 2008 (Dunton et,al., 2009).”

**Data Analysis**

For data analysis, the researchers decided that the most appropriate method to use was a systematic review since performing a meta-analysis on the data was not possible.  The researchers used the semiquantitative procedure by Sallis and colleagues.

**Conclusion**

From the study, it was obvious that if the U.S had to deal with obesity among the youth then environmental factors that can easily be modified and that could be interpreted as population level interferences as well as policies. The literature’s systematic review on the built and biophysical environment and that of the obesity in youth showed a minimal but diverse number of studies that represented a wide range of populations for study. The availability of a strong empirical evidence was unavailable in many of the environmental variables that were put into consideration (Dunton et,al., 2009).”

**Critique**

The researchers used fifteen studies that fit the set criteria. However, they should have used a larger number of articles for them to have a bigger base to base their research on. Fifteen is a good number but more articles would have been better.  Conversely, the researchers did not consider consistency in the types of variables that the study used. Further there was no consistency in the measures control variables and buffer sizes used. This was confusing and the results from the study were affected by the inconsistency. The study failed to discuss the qualitative environmental factors and their impacts on childhood and adolescent obesity as well as overweight. This would lead to better understanding of how environmental factors and other factors discussed play a role in obesity levels in children and adolescents. The literature and the study failed to adequately address the interdependency that exists in the various environmental variables and their correlation to obesity among the youth. The researchers did not provide a solution on how society would handle lack of resources to enable them to participate in recreational facilities that were healthy and helped in the reduction of obesity in youth.

Moreover, the researchers did not adequately address the issue of safe transport. There are several ways that this can be achieved such as encouraging the youth to walk to destinations or use bicycles rather than driving there. The study did not address how family and parents play an integral role in obesity and overweight issues among the youth. The environment that one grows in had massive impacts on whether they were obese or overweight. For instance, if one grew in a family that valued food and ate a lot of junk food they were likely to be obese. Moreover, there are parents who would eat even without the presence of hunger. When children inherited such habits they were likely to become obese. These are strong environmental actors that were not discussed in the study.  As earlier stated the researchers used few studies in the article and lacked a consistent measurement therefore they were unable to make calculations on standardized effect for the predictor variables which affected the outcome and results.

**Qualitative Article on Obesity in High School Students**

The article "Obesity Prevention Interventions in US Public Schools: Are Schools Using Programs That Promote Weight Stigma?" by Erica L. Kenney, Suzanne Wintner, Rebekka M. Lee, and S. Bryn Austin focuses on whether schools are using harmful programs to students in the absence of effective propagation in schools in dealing with obesity. Moreover, the study also looked at the frequency schools use evidence-based obesity programs.

**Introduction**

From the introduction part of the article, the authors state that how dissemination of broadly evidence-based programs is unclear and shows how the ineffective dissemination in schools leads to programs that are both harmful and ineffective as well (Kenneyet,al., 2017).” Apart from the updating of National School Lunch Program there are intervention programs that established in schools to promote physical activity among adolescents, encourage healthy eating as well as prevent obesity in adolescents. A review that was conducted identified 115 programs that were already in place. The researchers also explored the perceptions held by school administrators, significant facilitators as well as challenges they face in adopting wellness programs in their institutions. The hypothesis of the study was that evidence-based obesity prevention programs are used on rare cases.  The researchers used case study methodology. Study aimed at recurring 200 schools. The researchers send invites to 2387 and 247 accepted to be participants or agreed to send a colleague to be a participant (Kenneyet,al., 2017).

**Review of Literature**

In nursing observing ethics while conducting research is paramount. Researchers should get consent from the participants without coercion. The participants should be fully informed by the researchers on what the research is about and what will be required of them. The researchers ensured that they had to adhere to preferences of participants (Lo & Thomas, 2016). For instance, some participants wanted to participate online and the researchers allowed this since it was the preference of the participants.  For the researchers to know whether the schools participating made use of any predeveloped programs in promoting healthy eating habits, physical activity or time behaviors the participants were given a checklist with predeveloped programs.

**Discussion of Methodology**

 The researchers used the Likert scale to assess whether they experienced weight-based bullying or bantering in their schools. Moreover, the participants whether the program had impacts in students' academic performance, bullying school climate among others. To properly explore the potential disparities that allow access to wellness programs, 2 multivariate logistic regression model was constructed. This was aimed at testing the existence of any association between the students in the school that receive free lunch or lunch at a low cost, percentage of students from white origin, levels of grades of students, and the census regions, (majorly drawn from Northwest, south, Midwest, west). The research also looked in to the likeliness of existence of any wellness program and the presence of evidence-based intervention program. The data was analyzed using strata, release 13 (StataCorp LP) (Kenneyet,al., 2017).The researchers used the random sampling technique which is effective in reducing biases in research.

**Data Analysis**

From analysis the research discovered that from the respondents minority of them classified obesity, physical exercise and nutrition as three of their top health concerns in their respective schools. From the respondents 34.4% stated that physical activity was one of their top three health concerns while a mere 26.3% ranked nutrition and only 17% ranked overweight and obesity as a key health concerns among their top 3. Conversely, 81.4% of the participants ranked emotional and mental health as a primary concern. On the other hand, 67.2% of participants ranked social skills as a top concern whereas 21.5% stated that weight-based bullying, as well as teasing, was a problem in their schools.

**Researchers Conclusion**

 From the study the researchers concluded that few schools implemented prevention programs that dealt with obesity, nutrition as well as physical activity (Kenneyet,al., 2017). From the study there is absence of evidence however, many schools are trying to address obesity, overweight prevention and wellness without proper guidance and thus address wellness on their own. As a result of this schools are unintentionally using ineffectual or harmful programs. The researchers advocated that public health agencies and other funding bodies had a responsibility of assisting schools in the adoption of programs that were effective and safe in dealing with obesity issues and physical activity.

The researchers state that the participants were allowed to participate online. The lack of a well-trained interviewer for clarification and probing can lead to a participant providing information that is less reliable. On the other hand, the researchers fail to address the factors that have led to obesity and overweight issues in youth. On the other hand, the funds a school receives would have an effect on whether school provided free or subsidized lunch that was healthy. Out of the programs that were classified they require funding and expertise for schools to carry them out. Some of the staff have no idea on how to implement the programs and assume that dealing with obesity and overweight issues in students should primarily be the responsibility of the parents and not the teachers or the school (Kenneyet,al., 2017). Additionally, some of the staff are forced to work with certain programs and if the principals chose them to participate instead of the principals that could influence their response to the questions asked.

However, some of the school administrators are not keen in ensuring that students in their schools remain healthy thus they do not allocate enough funds for the program. Most of the participating schools has a higher white population as compared to other races. The non-participating schools had a lesser white population as compared to the participating schools. This makes it hard to generalize the study results across all the schools in the country as they do not represent the true picture regarding how schools handled the obesity and wellness issue among its students. The researchers did not consider the fact that since many of the participants had a huge population of white students there would be inaccurate findings regarding the minority groups. From the study it is clear that many schools are not keen and do not emphasize on wellness programs as part of their priority. The schools may engage in wellness programs but obesity, physical activity and healthy eating habits is not among top three concerns of many schools that participated in the research which shows that a lot needed to be done in making health and obesity priorities in schools. The researchers ensured that human subjects were protected according to the law. One of the primary goals of research is improved health. Nursing encourages that individual participating in research should be well informed about the diversity research and their cultural diversity protected by the researchers (Lo & Thomas, 2016).  The researchers of the study were careful enough to not exploit the participants of the study.

**References**

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