# Evidence-based practice research papers example

Health & Medicine, Obesity



Abstract

This paper discusses four research questions in the area of the writer's interest, which is the relationship between childhood obesity and the risk of cardiovascular disease in adults. The writer identified two qualitative and two quantitative questions. The qualitative questions dealt with the most effective intervention approach for preventing childhood obesity and the factors that enabled obese children to gain normal weights in adulthood. On the other hand, the quantitative questions dealt with the relationship between family lifestyle and childhood obesity and the relationship between breastfeeding and childhood obesity versus the relationship of bottle feeding and childhood obesity. The writer also discusses her colleagues' and peers' feedback regarding the feasibility of the identified research questions and provides a summary of the learning gained from this experience.

# **Original Qualitative/Quantitative Questions**

- Which intervention method will be most effective at helping middle-school children control their weight and at preventing them from becoming obese? There are various treatment options that can be used to prevent middle school children from becoming obese. One is through diet (Daniels, Jacobson, McCrindle et al., 2009). This involves the improvement of the children's energy balance through an increase in energy expenditure and a decrease in energy consumption (Daniels et al., 2009). In this regard, some of the dietary interventions that can help prevent childhood obesity include calcium intake, a high-fiber diet, and breast-feeding for infants (Daniels et al., 2009). Another treatment option is exercise. According to Daniels et al. (2009), " consistent exercise will result in a multitude of metabolic and physiological benefits by promoting weight loss through increased energy expenditure and possibly through inhibition of food intake" (p. 3). It has also been found that physical activity facilitated the maintenance of the ideal weight among children and helped in reducing the risk factors for cardiovascular disease in children. However, the benefits of exercise will be achieved only through the child's compliance with the physical activities prescribed for them. In this regard, health care professionals and care givers must be careful in selecting the most appropriate duration, frequency, intensity, and modality of exercise for each child.

Family and behavioral approaches may also be used for preventing childhood obesity (Daniels et al., 2009). These intervention approaches consist of involving the family or the parents in community- or school-based programs through the postcards and newsletters that are sent to them and through the occasional family-based events that are held in the community or in schools. Moreover, parents are intricately involved in family-based behavioral intervention programs, since the changes that children make in their diets and in their physical activities are highly dependent on their caregivers' implementation.

With all these possible treatment options, the writer is interested in determining what the most effective treatment option or intervention method would be so that policy-makers may be informed and so that resources for such initiatives may be more efficiently and effectively allocated. The writer will use a qualitative method for obtaining the answer to this question. More specifically, a case study method may be used where each intervention program would be considered a separate case. - What factors enabled obese children to achieve a normal weight upon reaching adulthood?

# This question is based on the premise that childhood obesity leads to an increased risk of

cardiovascular disease in adulthood, based on the fact that childhood obesity is likely to lead to adult obesity (Allock, Gardner & Sowers, 2009). Previous research showed that adolescents' BMI at the age of 13 and their BMI at the age of 18 were good predictors of BMI at age 35 (Allock et al., 2009). Evidence also showed that 81 percent of overweight adolescents would become obese young adults and that the cardio-metabolic syndrome among obese adults who had not been obese as children was lower than that of obese adults who had been obese as children (Allock et al., 2009). However, as pointed out by Allock et al. (2009), "not all obese children become obese adults" (p. 3). According to their findings, a significant percentage of obese or overweight children and adolescents gained normal weights upon reaching adulthood; thus, avoiding the increased risk of cardiovascular disease (Allock et al., 2009). In this regard, the writer is interested in examining the factors that enabled obese children to achieve normal weights in adulthood. More specifically, the writer aims to investigate the changes in these children's environment, which enabled them to achieve the normal weight. In addition, the writer aims to investigate their dietary and exercise regimens, as well as their parents' health profile, in order to determine whether these factors contributed to the individuals' change in metabolic course. It is aimed that the results of this study would inform

policy makers and healthcare professionals about the prevention and treatment strategies that are most effective so that more effort may be directed towards these strategies. To obtain the answer to this question, the writer would conduct a qualitative study, particularly a longitudinal ethnographic study, that will allow the writer to observe the children's behaviors and lifestyles over a specific period of time.

- What is the relationship between family lifestyle and childhood obesity? As pointed out by Katzmarzyk, Barreira, Broyles et al. (2013), childhood obesity

results from a complex interaction of various environmental, biological, and behavioral factors that may have an adverse impact on a child's long-term energy balance. They indicated that lifestyle behaviors such as dietary intake and physical activity have been associated with childhood obesity. In this regard, the writer is interested in determining the relationship between family lifestyle and childhood obesity, with the aim of informing policymakers and healthcare professionals on how to best involve parents in the treatment of childhood obesity. This would also have implications on the importance of educating parents about obesity and other health matters. As indicated by Daniels et al. (2009), evidence has shown that family-based behavioral interventions have resulted in long-term success among children aged between eight and ten. These interventions have been shown to be more consistently successful than education-only interventions (Daniels et al., 2009). However, since not all families are able to undergo such intervention programs even when they need to, nurses may play a big role in encouraging parents to lead healthy lifestyles and educating them about the

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benefits of having a healthy lifestyle, as well as how their lifestyle can affect their children's health in the long term. To obtain the answer to this question, the writer plans to conduct a quantitative study where the lifestyles of a number of families will be observed. Statistical data will be gathered with regards to the duration and frequency of certain activities that each family engages in. These data will also be quantitatively analyzed to identify their relationship to childhood obesity.

 Does a child who has been purely breastfed have less chances of becoming an obese adolescent compared to a child who has been bottle fed?
This question is based on the findings of Flores and Lin (2012), which indicated

that certain early childhood, infant, prenatal/pregnancy, and parental factors, either in combination or independently, can lead to severe obesity among kindergarteneners. In this regard, they recommended that the growth curves of children as young as nine months old be monitored with regards to whether they go over the 85th percentile of the ideal BMI, so that the young children with the highest risk of incurring severe obesity may be identified and provided with the appropriate intervention, which can include counseling and parental education (Flores & Lin, 2012).

The writer is interested in determining the relationship between breastfeeding and childhood obesity. Although previous researchers have already examined this relationship, their findings were weak due to confounding environmental, genetic, cultural, child, and maternal variables (Lefebvre & John, 2013). In this regard, the writer is interested in determining the effects of a pure breast feeding regimen on children's risk of developing obesity in comparison to children who are bottle fed. Although the results may not lead to conclusive findings with regards to the benefits of breast feeding on the prevention of childhood obesity, the findings may be used to inform parents, physicians, and nurses with regards to their options when considering the appropriate diet for children in the early childhood stage. To obtain the answer to this question, the writer will conduct a quantitative study, which will involve two sample populations. One would involve infants and toddlers who are purely breast-fed and another that involves infants and toddlers who are purely bottle-fed. The weights of the infants and toddlers in both groups will be monitored over a certain period of time. They will be statistically analyzed in order to determine which group of young children has a higher risk of developing obesity.

#### **Feedback Obtained from Colleagues**

In this regard, the writer thinks that the question that is more worthwhile to pursue is the question on what the relationship is between family lifestyle and childhood obesity as this can be conducted with a small population sample and may not require as much time as the other research questions in order to obtain results. However, the writer received feedback that investigating families' lifestyles per se might be too broad a scope and suggested that a specific lifestyle pattern or behavior be investigated instead. They suggested that narrowing the scope would allow the writer to focus on a specific lifestyle attribute, which in turn would enable her to obtain more concrete results. As a result, the writer chooses to focus on investigating the relationship of sleep and obesity, so that the research question becomes, " What is the relationship between the amount of sleep that middle-school children get and their risk of developing childhood obesity?"

### **Summary**

This experience enabled the writer to critically evaluate the findings of existing research in order to identify the gaps in research findings. It also made the writer realize that there are many facets to an area of research where each facet must be investigated in order to obtain comprehensive answers to research questions. However, since there are always limitations in the studies being conducted, the writer has learned that it would be best to focus on specific areas as these would enable the attainment of more significant and conclusive results in comparison to conducting a research that involves a broad area of concern.

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