

# Behavior Change of Childhood Obesity Using the Transtheoretical Model

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## ABSTRACT

Obesity is a serious problem and is associated with serious health risks, Childhood obesity is a serious problem worldwide and in the United States. Obesity prevalence among children and adolescents is too high. Scientists and medical professionals have found that the easiest way to improve the health outcome is to have a health behavior change, including changing the habits and the attitude to help to prevent diseases at the personal level and to have health behavior change on the policies and the environment at the community level, Transtheoretical Model is one of the model for behavior change can be used and help in childhood obesity.

**Keywords:** International Financial Reporting Standards (IFRS); Earnings quality; Non-financial firms; Emerging markets; Ghana

## OBSESITY EPIDEMIC

Obesity is a serious problem and is associated with serious health risks (NIH, 1998) [1]. Obesity is a public health problem worldwide has been linked with significant health risks and comorbid conditions (Hill, 2008) [2], incidence of obesity doubled in the United States since 1960, with one third of the adult population currently obese (Ogden, 2006) [3] and affecting, along with overweight, over a third of the world's population today (Stevens, 2012) [4]. The World Health Organization (WHO) refers to obesity as an epidemic disorder' (WHO, 2016) [5].

## CHILDHOOD OBESITY

As a part of the general obesity problem worldwide, Childhood obesity is getting more attention. Childhood obesity is a serious problem worldwide and in the United States. Obesity prevalence among children and adolescents is too high. In the United States, the percentage of children and adolescents affected by obesity has more than tripled since the 1970s (Fryar, 2014) [6]. Data from 2015-2016 show that nearly 1 in 5 school age children and young people (6 to 19 years) in the United States has obesity (Hales, 2017) [7].

There is a multiple factor that can affect obesity in children, including the genetic factors which are difficult to change. But the increased incidence of obesity in general and in children and adolescents especially can be explained with other factors especially the modern change in the behavior in the last 50 years, like increase in the frequent fast food consumption, eating occasions away from home, large portion sizes, high consumption of beverages high in

sugar (Mozaffarian, 2011) [8].

## BEHAVIOR CHANGE AS OBESITY SOLUTION

Scientists and medical professionals have found that the easiest way to improve the health outcome is to have a health behavior change, including changing the habits and the attitude to help to prevent diseases at the personal level and to have health behavior change on the policies and the environment at the community level.

Encouragingly, research has shown that the risk of obesity and related health disorders can be significantly reduced through healthy lifestyle behaviors, such as being physically active and maintaining a healthy diet (WHO, 2004) [9]. So medical professionals and researchers have been trying for the last 20 years to change the health behavior and provide better health education that can ultimately produce effective health outcome, those behavior change that the professionals were trying to implement was initially based on experience and their knowledge of the literature but wasn't based on evidence.

## TRANSTHEORETICAL MODEL

On the models to have health behavior is Transtheoretical Model. Transtheoretical Model or what is known as stages of change, was developed by Prochaska and DiClemente in 1984. (Prochaska, 1984) [10]. It is a method of self-altercation and a guide for explaining changes, and intervention strategies. It was developed through studies examining smokers who were trying to quit smoking, trying to understand the difference between people who quit smoking by their own and compare them with individual

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required further treatment.

The model focuses on individual decision. It's a model of intentional change, it assumes that people don't change behavior quickly and easily, and it involves developing a varying series of internal intervention to promote a behavior change in relation to a chronic health issue, with a goal of transforming a person from an unhealthy behavior to a healthful one.

The model has 6 stages starting first with Precontemplation which simply mean that the individual has no intention of changing, secondly Contemplation where the person starting being aware that they have a problem and start to think and learn about it , thirdly preparation which is a mean the individual has a plan to take action within a certain period of time and he is may already made small changes in behavior, fourthly Action which mean to start modifying the behavior , this is requires time , commitment and energy, and carry a risk at reverting if didn't plan for problems, fifthly Maintenance—which mean to maintain the new behavior for 6 months, this required to use positive strategies so help the person not to relapse, finally Termination which mean to exit the cycle of change and the individual then is no longer tempted to lapse back, and has a new self-image and total self-efficacy.

The stages are not necessarily gone through in any specific order, in fact they often overlap, and people tend to bounce back and forth from one to another.

Transtheoretical Model will be viewed in terms of obesity and weight control. The model efficiency in generating considerable weight loss in obese persons has been discovered to vary successful.

## PRECONTEMPLATION

Obese children family, at this stage may not have the intent to change their children behavior in the near future, as they may be not know or have enough information about the consequences of their children eating habit and behavior, as might not be aware about the health risks of obesity in their children and its comorbid conditions (Hill, 2008) such as diabetes, dyslipidemia, heart disease, non-alcoholic fatty liver disease, and many others or because they might have numerous unsuccessful attempts to lose weight and they have become discouraged about having change about their obesity. Some families might have attempted to change their behavior in the past but failed. Some families might have been trying them self and were unsuccessful, so they might have resistant or unmotivated and tend to avoid information, discussion, or thought with regard to obesity and weight loss.

At the community level, the community might not have enough awareness about the health risks of obesity its comorbid conditions, in some cultures child obesity may represent how healthy he is, as some cultures wrongly believe the big and obese the child is, the more healthy and strong he is, as the family will be trying get their children as “chubby” as possible in regardless of the kind of the food how healthy it might be.

## CONTEMPLATION

In these stage the obese children family starts to be aware of the pros and benefits of losing weight and adapt more healthier behavior, and they may have the intent to change within the next six month, but they might considering the cost involved in changing the behavior, like the cost of healthy food like fruits and vegetables, they might seriously undecided to change.

A lot of people might only get trapped between the pros and cons of diet and behavior change, which can produce somewhat of a profound stubbornness, that may lead to be trapped in this stage for extended periods of time. As George Norman wrote when dealing with stress management, “We often characterize this phenomenon as chronic contemplation or behavioral procrastination.” Those families might not be ready or traditional weight loss action programs.

## PREPARATION

Is the stage the family intends to take steps to change, where they start to act against their weight problem, they may have started to check the closest gym to their home, or started counting the calories for their children's diets, they might start attending health education classes and talking to the nutritionist. In this stage the family will be open to have their children recruited for lose weight programs. Although they may not meet the criteria for effective obesity weight action plan this is considered at the early stirrings of the action stage.

At the community level we should limit advertisements of less healthy foods and beverages and discourage consumption of sugar-sweetened beverages and Increase support for breastfeeding and require physical education in school.

## ACTION

In this stage the child or his family started to make specific changes to their current diet or lifestyle, the action can be defined as behavioral transformation which needs considerable commitment of time and energy. like deciding to eat low calorie diet and started eating more balanced meals and go to the gym after school, enroll in sports at school or at the gym. This stage it's also very important to resist the relapse as much as possible, as some may not tolerate the taste of the diet or staring missing their high calorie unhealthy diet.

## MAINTENANCE

Maintenance is a continuation of the Action stage for six or more months. in which the child or his family applied the healthy behavior such as physical activity, and low calories diet and were able to keep the healthy behavior. The new behavior becomes more routine and relapse potential is lower than in the previous stage.

The main thing in this stage is that the family should be working hard to working to prevent the child to go back to their old high calorie meals and unhealthy habits, and he continues to keep up with their exercise and healthy diet. The child should get used to his new healthy lifestyle and consider that as a way of living, which will make them less likely to relapse and more confident in maintaining the new behavior.

At the community level a lot of steps must made to Increase availability and the affordability of healthier food and beverage choices to public. Improve geographic availability of supermarkets in underserved areas and provide incentives to food retailers to locate in and/or offer healthier food and beverage choices in underserved areas.

## TERMINATION

In this stage the behavior is firmly fixed or established; and it's difficult to relapse, and it becomes a second nature.

At the community level we should Improve availability of mechanisms for purchasing foods from farms provide incentives for the production, distribution, and procurement of foods from local farms and to restrict availability of less healthy foods and beverages in public service venues 8. Institute smaller portion size options in public service venues.

## CONCLUSION

Obesity prevention strategies in children usually focus on the benefits of a healthy lifestyle at the doctor's office during the well visit. Even though this has been practiced largely in western countries, the prevalence of child obesity continues to rise. This trend suggests that the current approach may, by itself, not be as effective as we planned, and did not promote behavior change in the children. The main concern that the children when they turn to be adults continue to engage in unhealthy lifestyle behaviors which increase their risk of obesity, obesity related health risks, and premature death. That's why health professionals must understand behavior change models that explain variation in lifestyle behaviors to implement effective obesity prevention behavior change interventions at the individual level and the community level.

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