**Introduction**

Osteoporosis affects the quality of life, the ability to work, and basic activities of daily living. Osteoporosis is a disease marked by reduced bone strength leading to an increase in fractures. Every day, our body breaks down old bone and puts new bone in its place. As we get older, our bones break down more bone than they put back. If you do not take the steps to keep your bones healthy, you may lose too much bone and osteoporosis may develop. Men and women are both affected by osteoporosis. In the United States, an estimated 5.3 million people aged 50 years and older have osteoporosis. Most of these people are women, creating 4.5 million of the people in the United States and the other 0.8 million are men. Over 34 million people have low bone mass, which puts them at an increased risk. There are many factors that contribute to osteoporosis and fractures. Nutrition and physical activity are important controllable risk factors that will help reduce the risk of the disease. Osteoporosis is largely preventable. An osteoporosis treatment program includes a focus on proper nutrition, exercise, safety issues, and lifestyle changes to prevent or slow future progression of osteoporosis and reduce the risk of future fractures.

**Goal**

Our goal is to educate and engage the target population on nutrition and exercise. We also want to bring awareness to the younger population and provide resources to support women over the age of 50 to lower the prevalence of osteoporosis.

**Objectives**

- Educate the function of exercise and nutrition on the prevention and treatment of osteoporosis.
- Identify risk and address other social constructs that will enable participants to improve self-care.
- Provide a physical activity and nutrition seminar program that will promote strength training and increase self-efficacy in continuing a healthy lifestyle.
- Provide a support system group to encourage healthy behavior change.
- Encourage healthy behavior change by providing a support platform over a 12 month period.

**Program Activity**

- The Health Belief Model is known as one of the early ideology of health behavior that was first established in the 1950s by social psychologists H. A. Lewenhau, Irwin M. Bronstein, Howard Green, and C. Douglas. The Health Belief Model was intended to prevent problems instead of directly treating them and attempts to explain and predict health behavior. It also motivates people to take positive health action that will avoid negative health consequences or the primary motivation. The Health Belief Model is based on six constructs: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy. The Health Belief Model has been applied to a range of health behaviors and populations. Women aged 40 and up are at the most risk for developing osteoporosis. 88% of the 4 million people at risk for osteoporosis are women. To lower the risk of osteoporosis in women we plan to educate and demonstrate the effects of exercise and nutrition with an interview style questionnaire that aims to discover various social perceptions and identifying risk of developing osteoporosis. To show the perceived susceptibility of osteoporosis, we plan to display 3D models of the effects of osteoporosis. To present the benefits of an appropriate nutrition and exercise program. To identify the perception of barriers, severity, and cues to action that will prevent people from progressing with osteoporosis, we plan to have a one on one consultation with certified health coaches and other licensed healthcare professionals. Self-efficacy is important because it shows confidence in one’s ability to take action. We plan to build self-efficacy by providing healthy food options to encourage people and having community health workers as a motivation along with trained and certified exercise instructors. Together, this will promote better health, improve the quality of life, and it can also help by developing strategies to cope with osteoporosis.

**Theoretical Grounding**

- The Health Belief Model is based on six constructs: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy. The Health Belief Model was initiated to prevent problems instead of directly treating them and attempts to explain and predict health behavior. It also motivates people to take positive health action that will avoid negative health consequences or the primary motivation. The Health Belief Model has been applied to a range of health behaviors and populations. Women aged 40 and up are at the most risk for developing osteoporosis. 88% of the 4 million people at risk for osteoporosis are women. To lower the risk of osteoporosis in women we plan to educate and demonstrate the effects of exercise and nutrition with an interview style questionnaire that aims to discover various social perceptions and identifying risk of developing osteoporosis. To show the perceived susceptibility of osteoporosis, we plan to display 3D models of the effects of osteoporosis. To present the benefits of an appropriate nutrition and exercise program. To identify the perception of barriers, severity, and cues to action that will prevent people from progressing with osteoporosis, we plan to have a one on one consultation with certified health coaches and other licensed healthcare professionals. Self-efficacy is important because it shows confidence in one’s ability to take action. We plan to build self-efficacy by providing healthy food options to encourage people and having community health workers as a motivation along with trained and certified exercise instructors. Together, this will promote better health, improve the quality of life, and it can also help by developing strategies to cope with osteoporosis.

**Program Evaluation**

- The Health Belief Model is based on six constructs: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy. The Health Belief Model was initiated to prevent problems instead of directly treating them and attempts to explain and predict health behavior. It also motivates people to take positive health action that will avoid negative health consequences or the primary motivation. The Health Belief Model has been applied to a range of health behaviors and populations. Women aged 40 and up are at the most risk for developing osteoporosis. 88% of the 4 million people at risk for osteoporosis are women. To lower the risk of osteoporosis in women we plan to educate and demonstrate the effects of exercise and nutrition with an interview style questionnaire that aims to discover various social perceptions and identifying risk of developing osteoporosis. To show the perceived susceptibility of osteoporosis, we plan to display 3D models of the effects of osteoporosis. To present the benefits of an appropriate nutrition and exercise program. To identify the perception of barriers, severity, and cues to action that will prevent people from progressing with osteoporosis, we plan to have a one on one consultation with certified health coaches and other licensed healthcare professionals. Self-efficacy is important because it shows confidence in one’s ability to take action. We plan to build self-efficacy by providing healthy food options to encourage people and having community health workers as a motivation along with trained and certified exercise instructors. Together, this will promote better health, improve the quality of life, and it can also help by developing strategies to cope with osteoporosis.

**Better Bone Health Timeline**

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**Better Bone Health: Health Community Clinic**

Naijah Hughes, Dakota Turnage, Kintara Williams, and Christopher Fangna

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**Planning (1-2 Months):**
- Recruiting
- Marketing and Promote
- Creating Structure and Organizing
- Training Leadership and Supporting staff

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**Implementation:**
- Health Coaching Consultation
- Nutrition Seminar
- Physical Fitness Activity
- Health Coaching Consultation

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**Follow-Up and Evaluation (3, 6, and 12 months):**

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**References**


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