

EFFECT OF MUSIC THERAPY ON MENOPAUSAL WOMEN
AT A HIGH RISK FOR CARDIOVASCULAR DISEASE

Name

Course

Instructor

Date

Purpose/ Problem Statement

In the current health situation, cardiovascular diseases are considered to be the leading cause of death among Canadian women. Two in every three women have one of several significant risks factors for heart diseases. It is quite evident that women are underrepresented in prevention and health studies. Therefore, this study focuses on finding out whether musical therapy is effective in menopausal women suffering from cardiovascular diseases. According to Goodman (2011), issued with the opposite of estrogen and androgen effects on cardiovascular disease uncertainty, it is quite an evidence that androgen predicts a better increase in cardiovascular disease in women over the age of 50 or in their menopause period. With a high level of androgen in women in their menopause period, music therapy has been found to reduce blood pressure, heart rate, and respiratory rate, especially in menopause women suffering from coronary heart disease. Benefits associated with music therapy decreases the level of anxiety, heart rate, and blood pressure to women above the age of fifty who are suffering from cardiovascular heart diseases (Goodman, 2011).

Goodman (2011) maintains that cardiovascular diseases are considered to be the leading causes of mortality in women across Canada as well as in the bigger part of the industrialized world. In 1993, CVD accounted for an approximate of 39% of all deaths within Canada, which made 8%, happened due to stroke, 22% heart disease, and 9% other CDV related diseases. The problem of CVD for women in Canada pronounced 41% of all deaths of menopausal women across the country. Women at their menopausal state have a higher risk of developing cardiovascular disease. It is connected to the drop of estrogen in menopausal women. 13% of menopausal women have blood pressure, with 45% have high blood cholesterol. It increases the

risk of suffering from cardiovascular diseases. In Canada, a woman risk of death from CDV for times after menopause period. This is the result of the rate of stroke, which increases during the menopausal stage (Goodman, 2011).

Significance and relevance of the study

The relevance and significance of this investigation are aimed at understanding music therapy with the main focus on understanding its effect on cardiovascular disease. The aim was to understand the step involved in music therapy to facilitate a positive impact on cardiovascular diseases, especially to women in their menopausal stage. With improved mood exhibited in music therapy, cardiovascular patients can reduce their level of anxiety, thus lowering risk displayed by this disease, especially in menopausal women. It is quite evident that the effects of music therapy in cardiovascular diseases will be discussed in this study concerning the menopausal stage of the patients. Leow *et al.* (2010) assert that menopausal patients' experiences high levels of anxiety, and this causes the risk of suffering from cardiovascular diseases. There is the need to conduct a comprehensive study on whether music therapy may reduce the level of anxiety, which, in the end, may reduce the possibility of acquiring cardiovascular diseases.

Research Question/Hypotheses

Leow *et al.* (2010) maintain that medicine and music have been closest partners since the beginning of western medicinal practice. Music therapy is considered to be an allied health profession and one of the most expressive therapies. This therapy is deemed to primarily assist patients to improve their health across several domains but especially on cardiovascular

diseases. According to Leow *et al.* (2010), music therapy, which consists of faster tempo, increases breathing, proper blood pressure, and improves heart rate. Music induces a gradual and continuous dynamic change to patients with cardiovascular diseases. With this notable effect, it is quite important to develop studies which will identify if the same effect caused on a patient who suffers from cardiovascular disease and is in their menopausal period. For menopausal cardiovascular patients, changes brought by music therapy may be considered as the substrate for the emotion which may likely take a bi-directional way (Leow et al. 2010).

The research indicates that every crescendo from music therapy leads to narrowing of blood vessels thus increased heart rate and respiratory amplitude for the patients (Leow *et al.* 2010). It was indicated that music is a productive way of impacting positive effects on menopausal cardiovascular patients. From these researches, the proposed question is:

❖ What the effects of music therapy on menopausal women who are at a high risk of acquiring cardiovascular disease are?

From the above indicate research question, three main hypotheses are going to be tackled in this study. These hypotheses are:

❖ Is it effective to engage a cardiovascular patient in music therapy?

❖ Are women at their menopausal stages appear at a higher risk of acquiring cardiovascular diseases?

❖ What are the effects of patient-controlled music on cardiovascular disease and response to stress?

Design

The experimental group was subjected to perform pre- and post-treatment measurements. It employed a controlled quasi analytical, quantitative methodology. The methodology adopted the use of a non-probabilistic sampling and given random assigning to the participants who were divided into two groups (Brooke-Wavell, 2001).

The Research Design

The research will be designed based on identifying the literature in regards to the value of music therapy to menopausal patients who are at the risk of having cardiovascular disease. The key factor of the research will be to select different styles of music that are to offer the respondents alternative in the choice of forced music for them to have a realistic and valuable relaxation. These will witness the use of a selection of music based on music criteria that are predetermined to meet an appropriate therapy process. The design will include the proposed duration and the timing for the therapeutic process. The appropriate relaxation form guide will determine the consistency of the process.

Methodology

Patients are to be exposed to receptive music therapy individually through musical auditions in a specific procedure. It will include music simulations, sensations, situations, reflections, and alteration. The pieces to be used in the simulation stage are to rely heavily on the Baroque Classical, Beethoven, Brahms, Bach, Grieg, Josquin des Pres, Dvorak, and Mozart. The sensation will consist of $\frac{3}{4}$ of the physical and emotional awareness sensations that will have been perceived during the musical stimulation stage. The situation stage will involve $\frac{3}{4}$ processes that the patient will have to identify the daily conditions in which the sensations occurred most

frequently. During the reflection stage, the patient will reflect on the feelings that are experienced and how they significantly related to her daily life situations. The three stages (sensational, situation, and reflection) are educational as they may occur concurrently. During the alteration, the stage will involve an analysis of the daily living habits which are expected to occur after weeks or even months. Each of the sessions is to last for 35 minutes. Repeated measurements are to be made to ascertain their self-reporting anxiety levels, mood, and pain before and after the hospitalization process. The study is to last for six months to have results that are valuable and reliable.

The Participants

The respondents are to undergo a medical examination under the supervision of a general therapeutic specialist. Women are also to undergo an electrocardiogram analysis of their blood pressure, urine and blood analysis, weight measurement, and analysis as well as the analysis of their weight and body mass index. It will also be vital to ascertain if the respondents are at the moment of the study participating in any aerobic or physical exercises. Patients who have severe health conditions, including body fractures, dizziness, hypertension, vertigo, and undergoing drug treatment are to be excluded from the study. The respondents are to be divided into two groups of 24 each. One group is to participate in the therapy, and the other is not to participate in it. It will be done in the presence of all the respondents to avoid any misunderstandings and encourage commitment to the research activities (Brooke-Wavell, 2001).

Ethical Considerations

The study will have to be approved by the health studies ethics committee. The respondents are also to be given the consent forms that they will have to fill and had into the

researchers. All the information that will be collected from the respondents will be confidential, and their identities will not be disclosed (Cobbs, 1998).

Data Collection and Analysis

The data on the participants will be collected through one on one questionnaire guided personal interviews, observation, and records. The information will then be coded and will utilize the SPSS and quality life scale database packages that will aid in the analysis. They are to be prepared from the statistical packages of the PQLCI. The study will also perform a descriptive analysis of the population variables in terms of education level, occupation, and marital status, among others.

Variables

The study of the qualitative variables will utilize the chi-squares and the binominal distributions of the variables that consist of two or more variables. Given the small size sample, the Wilcoxon non-parametric modes of tests will be utilized to analyze the HRQOL differences in measurements between the groups. Lastly, the statistical difference between the given variables will be determined by the use of the Kruskal-Walis and Mann-Whitney tests (Wilmore, 2001).

References

Brooke-Wavell K., Prelevic G.M., Bakridan C. and Ginsburg J. (2001) Effects of physical activity and menopause hormone replacement therapy on postural stability in postmenopausal women: a cross-sectional study. *Maturitas* 37(3), 167–172.

Cobbs E. and Ralapati N.A. (1998) Health of older woman. *Medical Clinics of North America* 82(1), 127–144.

Goodman, K. (2011). *Music Therapy Education and Training: From Theory to Practice*.
Springfield, Illinois: Charles C. Thomas.

Leow, Q *et al* (2010). Patient's experiences of music therapy in a Singaporean hospice.
International Journal of Palliative Nursing. 16(7), 344-350

Wilmore J.H. (2001) Dose-response: variations with age, sex, and health status. *Medicine & Science in Sports & Exercise* 33(Suppl. 6), 622–634.