



# A Research Project on the Prevention of Myocardial Infarction

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## Abstract

The year 2010 saw the release of the Future of Nursing Report by IOM, a report that encouraged nurse practitioners to exploit their full potential in relation to their training and education. In the report, the fifth recommendation entailed the plan and vision to double the number of nurses with doctorate degrees by 2020. It was also clarified that all FNP nurses ought to obtain research in future. Therefore, a personal pursuance of a research program and the selected project are projected to not only improve knowledge and skills from theoretical and practical perspectives but also aid in improving healthcare outcomes among populations in the context of America. In so doing, aspects such as patient satisfaction will aid in saving America's budget extended to the national, state, and local-level health care providers – due to the presence of a healthy population. Furthermore, the adoption and implementation of the project seeking to prevent myocardial infarction is projected to improve the American economy in future due to the resultant avoidance of health-related adversities such as absenteeism and presenteeism in the workplace. It is also predicted that the successful completion of a research program and the selected project will enable me to incorporate evidence-based practice into care provision processes while seeking to assure targeted health care. Indeed, the project regarding myocardial infarction was implemented by enhancing educational campaigns at the community levels (such as the underserved areas) while striving towards equity in resource provision and access to care in relation to some of the strategies that could aid in preventing myocardial infarction.

**Keywords:** Myocardial, Infarction etc.

## 1 Introduction

Having worked in an intensive care unit (ICU), I have gained knowledge and experience regarding the criticality of maintaining cardiac health towards body functioning. Given the threat of myocardial infarction, a heart-related condition, on attributes such as life expectancy (or premature mortality) and related comorbidities, an investigation regarding the manner in which the condition can be prevented is deemed highly relevant and insightful. As stated in the *Beside Critical Care Guide*, first occurrences of myocardial infarction are documented to be 525,000 annually while recurrent attacks are reported to be 190,000 in each year (Kwame, Schape, Cogbill and Schoenfeld, 2013). In a related observation, the National Institute for Health and Care Excellence (2013) documented that 15 percent of the patients die from acute infarction. Additional documentation by the American Heart Association highlights that a myocardial infarction occurs within the context of the U.S. in, approximately, every 44 seconds (Rimawi, Gay, Howell & Cope Meyers, 2013). Therefore, it can be inferred that this condition is

one of the leading causes of death in the U.S. Despite the fact that the aforementioned studies and reports are insightful due to their documentation regarding the prevalence of myocardial infarction, they falter in such a way that they are yet to give an in-depth analysis of some of the preventive approaches that could be used to address the condition. Hence, this research project is deemed important because it seeks to fill in the gap by examining some of the region-specific prevention mechanisms that could aid in reversing the prevalence of the condition. It is also worth noting that the study has been motivated by a family tragedy in which my grandfather passed away due to a heart attack and his death was attributed to adversities such as a lack of exercise, obesity, and the taking of a diet high in fats.

## 2 Methodology

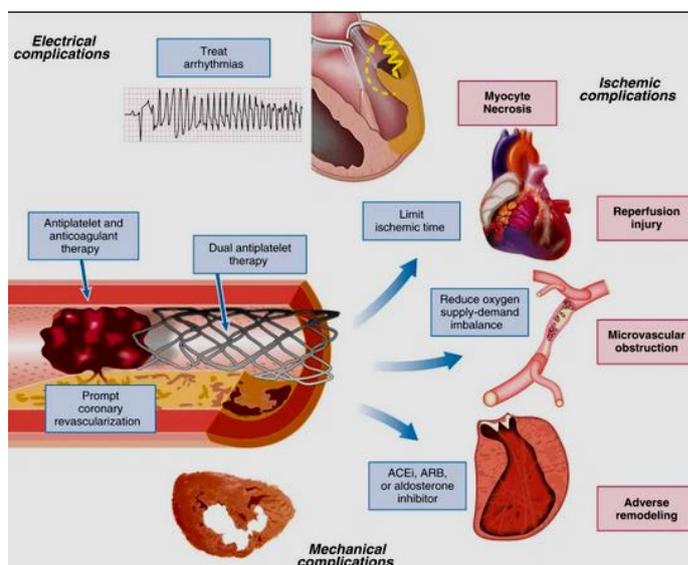
Period	Activity
1-2 months	Conducting a feasibility study to determine some of the perceived barriers to implementation and

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	necessary resources/infrastructure
<b>3-4 months</b>	Selecting and briefing community representatives from schools, health care organizations and other relevant authorities in the Livingston community
<b>5-12 months</b>	Engaging in community sensitization programs by educating the selected representatives
<b>13-32 months</b>	Representatives' engagement in the education of the rest of the Livingston community regarding MI prevention activities (diet alteration, alcohol consumption, regular physical activity, smoking cessation and weight management programs in the Livingston community)
<b>33-35 months</b>	Evaluating the level of program success in relation to the new number of MI hospitalization and re-hospitalization, comparing to the past trends
<b>36<sup>th</sup> month</b>	Outcome presentation to relevant authorities (in the Livingstone community) with respective recommendations for adoption and implementation towards a healthy population

### 3 Results and Discussion

The focus of this research project will lie in the primary and secondary prevention of myocardial infarction (MI). According to Smith (2016), primary prevention seeks to curb a disease or condition prior to its occurrence (including education regarding healthy behaviors). On the other hand, it has been asserted that secondary prevention enables people to return to their normal functioning by preventing any potential recurrence. In relation to MI, studies have examined the specific risk factors as those that account for the prevalence. For instance, a study by Dinh, Thuy, Bonner and Clark et al. (2016) indicated that some of the risk factors for MI include obesity and/or being overweight and smoking. Therefore, this research project will seek to educate community members via sensitization campaigns regarding the manner in which these risk factors can be alleviated. In turn, the prevalence of MI is projected to be reversed while assuring a healthy population in America, yielding a further tertiary effect of a better American economy due to the people's improved productivity in the workplace.



Notably, the research context was in the Livingston community. Given the multicultural nature of this region, the education campaign was provided in languages such as Punjabi, English, and Spanish. Indeed, the project is motivated by observations that non-compliance among patients is not solely linked to ignorance or unwillingness to follow directions. Rather, a failure by community members to understand the rationale behind a given regimen tends to contribute to non-compliance, an assertion concurred by Kwame, Schape, Cogbill and Schoenfeld (2013). It is further notable that a teach-back approach that enables community members to verbalize back their state of understanding was implemented. The approach is informed by significant improvements in outcomes among some of the intervention studies that have been conducted in the past in relation to aspects such as adherence, disease-specific knowledge and self-efficacy – in relation to the rate of hospital readmissions (Dinh, Thuy, Bonner & Clark et al., 2016). Issues of interest will include diet alteration, the practice of alcohol consumption and the need for regular physical activity, as well as smoking cessation and the importance of supporting weight management programs in the Livingston community.

### 4 Conclusion

Upon implementing the three-year research project regarding MI prevention in the context of America's Livingston community, one of the expected effects lay in the reductions of hospital readmission due to the people's sensitization about risk factors for MI. In addition, it is expected that the local healthcare authorities' expenditure on health will reduce

dramatically due to outcome improvement in terms of MI prevention, a situation that was evidenced by fewer hospital admissions. Similarly, it is expected that life expectancy will improve due to the avoidance of premature deaths arising from MI while the general quality of life among community members is expected to improve because of reductions in MI recurrences. In turn, the long-term effect was improved economic productivity in the Livingston community and the rest of America due to the dominance of healthy populations whose commitment to the workplace cannot be overemphasized. Despite the promising outcomes of the selected research project, various barriers are foreseeable. For example, the multicultural nature of the Livingston community imply that finances could be limited regarding the need for adequate personnel to provide additional education regarding MI prevention in various languages. Similarly, the multicultural nature of the community imply that winning the people's trust could prove dire. Furthermore, demographic complexities in terms of age and gender in the wake of inadequacy in accessing healthcare records imply that addressing risk factors such as smoking, exercising and the use of healthy diets could prove futile. However, these barriers was addressed via collaboration with senior leaders in the selected community, as well as representatives from relevant community and public health authorities.

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