

# The Effect of Healthy Phone-Call as Nutrition Management in Preventing Chronic Diseases

P.O.Y. Nurhesti<sup>1\*</sup>, N.K.G. Prapti<sup>1</sup>, K. Tirtayasa<sup>2</sup>

<sup>1</sup>Program Study of Nursing, Faculty of Medical, Udayana University, Jalan PB Sudirman, Denpasar, 80232, 0361222510

<sup>2</sup>Faculty of Medical, Udayana University, Denpasar

\*Corresponding author: [putuokayuli@unud.ac.id](mailto:putuokayuli@unud.ac.id)

**Abstract.** Based on basic health research in 2007, chronic disease is still in the top ten of the most occurred in Indonesia. From the health profile of Bali province in 2014, it shown that the chronic disease is still in the top ten of most visit in the hospitals, both in inpatient and outpatient. Bali province is one of province with high density population. The role of paramedic in curing the chronic disease can be in the form of primary, secondary, or tertiary prevention. Primary prevention for the chronic disease is conducted through modifying the risk factors via life style's change. The healthy phone-call method is based on the culture of Balinese community, in which they are very consumptive to use the communication technology, namely phone. Individual who has been screened to have risks of having the contagious disease is monitored by paramedics and get the needed medical services through long distance communication. Many controls are needed namely regular exercise, knowledge of healthy food, stress management. Telenursing method has several advantage, i.e., effective and efficient, lowering the curing cost of chronic diseases, and increasing the degree of the community health. The aim of this study was to know the effect of healthy phone-call to control the risk factor of chronic disease in Bali. The research method used was quasy experimental to analyse the difference in knowledge, attitude, and behavior of preventing chronic disease from nutrition management aspect in individual who has been screened to have chronic disease's risk before and after the healthy phone-call treatment. This study was conducted in working area of the Centre of Community Health III South Denpasar. Individual with chronic disease's risk was given intervention namely phone-call and short message three times per week for 3 weeks. The results of this study demonstrated a significant difference in chronic disease preventing behavior based on nutrition management aspect before and after given phone-call on 30 respondents ( $p = 0,000$ ). A healthy phone-call can be used as one of chronic disease primary prevention method through knowledge and information addition in individual with chronic disease's risk. Chronic disease can be applied in nursing nurturing treatment in preventing and promoting efforts both in community and in hospital.

**Keywords:** Healthy phone-call, chronic disease prevention, nutrition management

## I. INTRODUCTION

Based on research on basic health in 2007, chronic disease is still in the top ten of the most occurred in Indonesia [1]. From the health profile of Bali province in 2014, it shown that the chronic disease is still in the top ten of most visit in the hospitals, both in inpatient and outpatient. Bali province is one of province with high density population. The role of paramedic in curing the chronic disease can be in the form of primary, secondary, or tertiary prevention. Primary prevention for the chronic disease is conducted through modifying the risk factors via life style's change. The healthy phone-call method is based on the culture of Balinese community, in which they are

very consumptive to use the communication technology, namely phone. Individual who has been screened to have risks of having the contagious disease is monitored by paramedics and get the needed medical services through long distance communication. Many controls are needed namely regular exercise, knowledge of healthy food, stress management. Telenursing method has several advantage, i.e., effective and efficient, lowering the curing cost of chronic diseases, and increasing the degree of the community health.

## II. RESEARCH METHOD

Research method used in this study was quasy experimental method to analyse the difference in

knowledge, attitude, and behavior of preventing chronic disease from nutrition management aspect in individual who has been screened to have chronic disease’s risk before and after the healthy phone-call treatment. This study was conducted in working area of the Centre of Community Health III South Denpasar. Individual with chronic disease’s risk was given intervention namely phone-call and short message three times per week for 3 weeks.

III. RESULTS AND ANALYSIS

*The respondent characteristics based on parents’ risk*

TABLE 1.  
THE RESPONDENT CHARACTERISTIC

Risk	Amount	%
Father	18	60.0
Mother	12	40.0
Total	30	100.0

Types of chronic disease’s risks suffered by respondents were as follows:

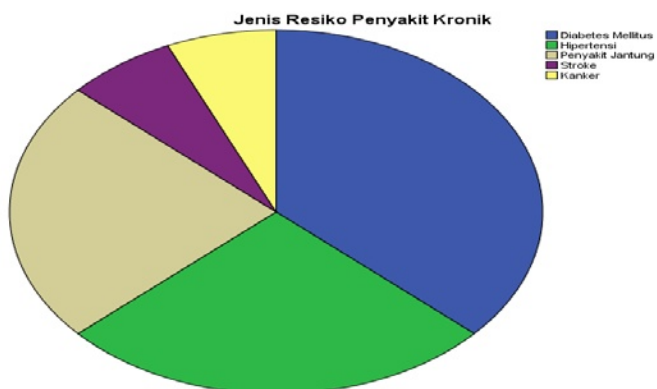


Fig 1. Types of chronic disease’s risks suffered

The results of this study demonstrated a significant difference in chronic disease preventing behavior based on nutrition management aspect before and after given phone-call on 30 respondents ( $p = 0,000$  less than 0.05). Sharma and Clark (2014) demonstrated that telehealth service given had positive support from nurse who provided caring to the chronic disease sufferer as the new method in nursing nurturing treatment [2]. Studies by Solomon (2008) and Knight & Shea (2014) found that there was a significant

relationship between personal management, patient characteristics, and the use of technology [3]. Telenursing was able to facilitate nurses in giving information related to personal management toward chronic disease sufferer, such as nutrition management, therapy protocol, and social support. Telenursing is a method that can assist nurses to provide information towards patient, so that they can do personal caring. There was many forms of telenursing that can be used by nurses, namely internet with various social media facility, phone-call, short message services and other facilities [4][5].

IV. CONCLUSION

There as an effect of healthy phone-call as nutrition management effort in preventing chronic disease. Health phone-call can be used as one of chronic disease primary prevention method through knowledge and information addition in individual with chronic disease’s risk.

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