

**DETERMINATION OF WEIGHTS FOR  
HEALTH-RELATED QUALITY OF LIFE  
INDICATORS AMONG ISCHEMIC HEART  
DISEASE PATIENTS:  
A FUZZY DECISION-MAKING METHOD**

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## **DECLARATION BY CANDIDATE**

I certify that this report and the research to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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## ABSTRACT

One of the significant current discussions in the health fraternity is about Health-Related Quality of Life (HRQoL). It consists of multidimensional indicators and serves the purpose of evaluating health quality among patients. Patients' perceptions of the impact of disease and treatment and the indicators such as physical, psychological, social function and wellbeing are investigated. However, there is no clear suggestions of which indicators contributed more than other because the arbitrary nature of HRQoL paves the way for fuzzy theory in evaluation of indicators. This paper described the application of fuzzy decision making method in ranking indicators of HRQoL among Ischemic Heart Disease patients. Four experts in health fraternity were selected as decision makers to extract information about health related status of Ischemic Heart disease (IHD) patients over eight indicators of HRQoL. The decision makers were required to rate the regularity of experiencing health-related problems in linguistic judgement among the patients. The five linguistic variables are the input data to a modified version of Fuzzy Simple Additive Weight decision making model. The modified six-step method was possible to tap the extent of decision maker's opinions on the severity of HRQoL experienced by the patients. It is shown from this study that social functioning recorded the highest problematic level while the indicator of role-physical recorded the lowest problematic level experienced by the IHD patients. The ranking obtained indicates the impact of the indicators to health quality specifically the Ischemic Heart Disease (IHD) patients.

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