# DEVELOPING AND VALIDATION OF A QUESTIONNAIRE FOR ASSESSMENT OF INDIVIDUAL'S PERCEIVED RISK OF DEVELOPING FOUR MAJOR NON-COMMUNICABLE DISEASES IN MYANMAR

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### ABSTRACT

The motive to adopt healthy lifestyles was greatly influenced by an individual's perceived risk of developing non-communicable diseases (NCDs). Exploring the individual's perception using a standardized tool is necessary to combat the current increasing trend of NCDs risk factors in Myanmar. However, there is no questionnaire that can assess the perceived risk of NCD in Myanmar. Hence, this study aimed to develop and validate a questionnaire that can assess the individual perceived risk of developing four major NCDs within country-specific socio-economic context. The study used an exploratory sequential mixed methods design. The question items pool was generated based on the health belief model in the qualitative part and items reduction and validation processes were done in the quantitative part by doing both exploratory (EFA) and confirmatory factor analysis (CFA). A total of 360 participants were included, and they were randomly split into two subsamples for EFA (n=150) and CFA (n=210). All participants were aged between 25 to 60 years of both sexes with no known history of NCDs. Face to face interview was conducted using a pretested questionnaire. Based on the literature search, an 86-item questionnaire was first generated based on the underlying constructs of the health belief model. Then two expert panels were conducted to make sure the content validity of the questionnaire. The 51-item questionnaire was used to collect data from the 360 participants. EFA proposed the five-factor solution (diminish severity construct items) with 22 high loading items, and these five-factors accounted for 54% of the total variation. CFA proved that hypothesized 5 factors model with 21-item questionnaire (one efficacy item was removed for low loading) was satisfied with adequate psychometric properties and model fit indices (RMSEA= 0.056, CFI= 0.921, TLI= 0.908, SRMR= 0.063 &  $\gamma^2/df$ = 1.66). Although the developed 21-item questionnaire (NCD-PR5-21) is required to test for policy implications, it is shown to be valid and reliable to assess the individual's perceived risk of developing NCDs among the Myanmar population. The questionnaire should also be tested on the utility in the mismatch between risk perception and current risk; and individualized counseling for behavioural change communication.

### **DECLARATION**

I hereby declare that the research work presented in this thesis is my own, unless otherwise acknowledged; it has not been submitted or published previously for a degree to this University of Public Health, or any other University.

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