Value of Willingness to Pay for a Quality-Adjusted Life Years Gained in Iran; A Modified Chained-Approach

Authors : Seyedeh-Fariba Jahanbin, Hasan Yusefzadeh, Bahram Nabilou, Cyrus Alinia, Cyrus Alinia

Abstract : Background: Due to the lack of a constant Willingness to Pay per one additional Quality Adjusted Life Years gained based on the preferences of Iran's general public, the cost-efectiveness of health system interventions is unclear and making it challenging to apply economic evaluation to health resources priority setting. Methods: We have measured this cost-efectiveness threshold with the participation of 2854 individuals from fve provinces, each representing an income quintile, using a modifed Time Trade-Of-based Chained-Approach. In this online-based empirical survey, to extract the health utility value, participants were randomly assigned to one of two green (21121) and yellow (22222) health scenarios designed based on the earlier validated EQ-5D-3L questionnaire. Results: Across the two health state versions, mean values for one QALY gain (rounded) ranged from $6740-$7400 and $6480-$7120, respectively, for aggregate and trimmed models, which are equivalent to 1.35-1.18 times of the GDP per capita. Log-linear Multivariate OLS regression analysis confrmed that respondents were more likely to pay if their income, disutility, and education level were higher than their counterparts. Conclusions: In the health system of Iran, any intervention that is with the incremental cost-efectiveness ratio, equal to and less than 7402.12 USD, will be considered cost-efective.