

study. Those who did not have insurance may be qualified for poor insurance, but they did not apply due to their present good health condition and their ability to pay out of pocket.

#### 27. Do Community Empowerment Activities Affect Quality of Life of People in Bangka and East Belitung Districts, Indonesia?

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**【Introduction】** The measurement of QOL scores and factors that influence QOL could have important implication for future interventions intended to improve health outcome. QOL has been proven affected by socio demographic characteristics and health insurance. Even though Indonesia does not have universal social security system, community empowerment activities supported by local government in health field are very active. However, number of studies measuring health benefits of community empowerment participation is very limited. Here we want to clarify predictors of QOL of people and to determine other factors that might influence QOL focusing on community empowerment factor.

**【Methods】** Survey was conducted in a sample of 827 people from Bangka and East Belitung Districts in March and April 2013 using two questionnaires: WHOQOL-Bref and socio-demographic questionnaires. Collected data were analyzed with statistic software (EZR) and the significant level for all statistical tests was set at 0.05.

**【Results and Discussion】** From 827 eligible respondents selected randomly, 824 participated and completed answer questions, reaching 99.6% of response rate. Results showed that age group, chronic diseases, education level, occupation, health insurance and community empowerment participation (desa siaga forum) have influenced QOL significantly. As expected before, subjects who participated in community empowerment activities had higher overall QOL and general health scores. Two-way ANOVA test showed that participation in desa siaga, interaction between desa siaga forum participation

and district had significant influence on overall QOL. Similar result also showed interaction between desa siaga participation and gender has influenced QOL significantly. Participation in community empowerment activities was suggested as a new potential factor affecting QOL.

#### 28. Effects of Selenomethionine and Sodium Selenite Supplementation on the Risks of Type-2 Diabetes in Kuo Kondo Alel-y (KKAy) Mice under Different Status of Selenium Level

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**【Introduction】** Selenium was thought to be beneficial to cancer prevention but recently it has been reported to increase the risks of type-2 diabetes. Different selenium levels before supplementation (baseline status) and selenocompound types are presumed to contribute to different risks. This study clarified the effects of baseline status and selenocompound types in selenium supplementation to the risks of type-2 diabetes. **【Methods】** KKAy mice were fed high fat diet and classified into deficient (no selenium) and sufficient (selenomethionine 0.1 ppm) groups. After two weeks, deficient group was divided into deficient control (n=10) and deficient+selenomethionine 0.5ppm (n=10) groups; whereas sufficient group was divided into sufficient control (n=8), sufficient+selenomethionine 0.5ppm (n=10), and sufficient+selenite 0.5ppm (n=10) groups. Selenomethionine and selenite represented organic and inorganic selenium. Selenium levels, GPx activity, oral glucose tolerance test (OGTT), insulin, and adiponectin levels were measured. **【Results and Discussion】** Selenium levels of sufficient group at baseline were higher compared to deficient group [t=1.43 p=0.20 (plasma), t=6.62 p<0.01 (kidney)]. After supplementation, selenium levels and GPx activities of all supplemented groups increased. Blood glucose level of sufficient+selenomethionine group in OGTT at minute 120 (161.60±76.80mg/dL) was significantly lower than sufficient control and