# Assessment of the quality of life among Lithuanian rural community

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**Background.** Measurement of health-related quality of life (QOL) has become significant because includes such dimensions as physical and psychological health, social relationships, environment. QOL and individual's perceptions of his/her own health has distinctive peculiarities among the rural population; therefore, they need to be further investigated.

**The aim** of the study was to assess the psychometric properties of the WHOQOL-100 (World Health Organization Quality of Life-100) questionnaire and to evaluate QOL among the population in a rural community.

**Material and methods.** The study population were randomly selected 150 Kaltinėnai men and 263 women aged 24–77 examined in 2006 by the self-administered WHOQOL-100 questionnaire (the response rate was 61%). The validity was evaluated by Pearson's correlation coefficients, while the reliability was assessed by Cronbach's alpha coefficient. The working score was standardized to a range from 0 to 100. The factor analysis was used for testing the construct validity of the WHOQOL-100.

**Results.** The convergent validity proved that the correlations between items inside the domain were high (level of independence r = 0.50 and spirituality r = 0.50). The reliability estimate of internal consistency based on Cronbach's alpha was in the range of 0.80–0.94. A principal component analysis with varimax rotation revealed a five-factor structure of the WHOQOL-100. The scores of the domains decreased with age among both men and women. Men aged <35 to ≥65 years scored lower in the level of independence and spirituality domains, and women had lower scores in physical, independence and social relationships domains.

**Conclusions.** These results disclosed suitability of the WHOQOL-100 questionnaire to assess quality of life among the Lithuanian rural community. Age and sex have a major impact on the assessment of QOL.

**Key words:** WHOQOL-100, rural community, quality of life, validity, reliability

## INTRODUCTION

In 1995, under the supervision of the World Health Organization (WHO) the WHOQOL-100 questionnaire was developed by researchers from 15 countries (1). Their purpose was to create an internationally applicable and cross-culturally comparable quality of life (QOL) measure. The questionnaire involves a person's subjective evaluation about his physical health, psychological state, level of independence, social relationships, personal beliefs, estimate of the environment. The WHOQOL-100 questionnaire is a population-based measure of broader health status, and can be used in service planning, monitoring, and measuring the health outcomes. This questionnaire provides a possibility for making comparisons with the health of different populations. The WHOQOL-100 is constructed of components which consist of objective living conditions and a subjectively perceived well-being. The objective living conditions are monitored by experts from the social and natural sciences. These objective conditions are measured independently of the understanding of the individuals exposed to them. The subjectively perceived health or well-being consists of evaluations performed by the individuals. To estimate the relationship between the objective conditions and subjective perceptions of QOL both sides are differentiated into a number of areas and domains. The objective conditions of life range from personal characteristic to the global environment, while the subjective perceptions are differentiated into various life domains from family to work conditions. Subjective evaluations of QOL assessed the positive aspect mostly described in terms of satisfaction and happiness, whereas the negative side was often described in terms of worries and anxieties. The assessment of QOL disclosed that some people are satisfied and happy although they have a lot of worries, while others are unhappy although they have only a few worries.

In Lithuania, over a decade there were investigations carried out dealing with students QOL (2), urban population (3), and analysis from clinical trials (4), but there was lack of in-

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formation on QOL among the rural population. The applicability and comparison of the WHOQOL-100 in different medical conditions depended on psychometric properties. Weeks et al. 2004 (5), Cleary et al. 2006 (6), Sabbah et al. 2003 (7) showed acceptable internal consistency (Cronbach's alpha >0.70), factor analysis yielded patterns of factor correlation according to the results of rural populations.

The aim of this study was to assess the validity and reliability of the WHOQOL-100 questionnaire among population in rural community and to analyze the age and sex relationship with the main domains of the questionnaire.

## MATERIAL AND METHODS

The study sample was randomly selected in Kaltinėnai rural community: 150 men and 263 women aged 24–77 (the response rate 61.0%). All the participants were examined by the self-administered WHOQOL-100 questionnaire. Approval from the regional Ethics Committee was obtained, and the participants signed a written informed consent prior to the filling in of the questionnaire. The WHOQOL-100 is organized into the following six domains: the overall QOL, physical, psychological, level of independence, social relationships, environmental and spirituality domains. Within each domain, a series of sub-domains (facets) of QOL summarizes that particular domain of QOL. The information concerning the respondent's socioeconomic status, such as education (primary, incomplete secondary, secondary, vocational, university), income (mean income in Litas for each person of the household per month), social (employed, unemployed, retirees) and marital status (single, divorced, widowed, married and cohabiting), was added to the WHOQOL-100 questionnaire. The study sample was divided into quartiles of family income.

### Statistical analysis
All the domain scores of the WHOQOL-100 were transformed to reflect a scale from 0 to 100. Mean values were compared using the t-test. Internal consistency of the domains was assessed using Cronbach's alpha coefficients. Convergent and divergent validity was evaluated using Pearson's correlations. Exploratory factor analysis with orthogonal varimax rotation was conducted to explore the factor structure of the data. To compare means of the standard scores between men and women and in the different age groups ANOVA analysis was used. To compare age-adjusted standard scores of the WHOQOL-100 between men and women univariate general linear model was performed. The difference was considered to be statistically significant when $p < 0.05$.

## RESULTS

Study sample characteristics are presented in Table 1. In order to assess the construct validity of the WHOQOL-100 questionnaire Pearson's correlations coefficients between items inside and outside the domains were calculated. The results showed stronger correlations between items inside the designed domain and weaker correlations of items with the other domains (Table 2). The Cronbach's alpha coefficients of internal reli-

ability were above the standard 0.7 for all the domains and ranged from 0.80 (spirituality) to 0.94 (level of independence). The Kaiser-Meyer-Olkin resulted in a measure of sampling adequacy of 0.92 and Batlett's test of sphericity ($\chi^2 = 4413.6$, df = 276, p < 0.0001) indicated the appropriateness to proceed with factor analysis. Principal component analysis with varimax rotation was carried out and yielded five factors with eigenvalues >1 explaining 60.7% of the variance. The first factor included facets relating to psychological, environment and spirituality domains (Table 3). The second factor comprised all the facets relating to physical health. The third factor was defined by physical safety and security, home environment, financial resources, physical environment and transport. All these facets belong to the environment domain. The fourth factor included all the facets from the psychological domain (with the exception of positive feelings) and the fifth one encompassed nearly all the facets relating to the social relationships domain. Table 4 and Table 5 demonstrate the discriminatory power of the WHOQOL-100 questionnaire. In physical and psychological domains women rated their QOL lower than men (61.1 (59.0–63.3) and 57.4 (55.6–59.1), p < 0.009, 61.0 (59.0–63.0) and 58.4 (57.0–59.7), p < 0.03, respectively). Table 5 showed comparison of the WHOQOL-100 scores between men and women when controlling for age. In this case we did not detect any statistically significant difference between men and women as compared to the WHOQOL-100 domains. The level of independence scores decreased with age for both men and women (Table 6). Older men scored lower in overall QOL (p < 0.076), the level of independence (p < 0.023) and spirituality (p < 0.042), whereas older women also scored lower in the overall QOL (p < 0.04), physical (p < 0.001) and social relationships domains (p < 0.003), as compared to the younger ones.

## DISCUSSION

The WHOQOL-100 consists of the six domains: the overall QOL and general health, physical, psychological, level of independence, social relationships, environment and spiritual domains. Within each domain, some of sub-domains of QOL add to a particular domain. Estimation of the validity and reliability of the WHOQOL-100 for every analyzed population group is an essential condition to evaluate survey questionnaire. Validity is the degree to which the measure reflects what is supposed to be measured or intended to be measured. Convergent validity refers to the extent to which different ways of measuring the same point intercorrelate with one another. Divergent validity demonstrates that a measure does not correlate too strongly with the measures examined. The results in our study assessed good correlations (r = 0.53, r = 0.50, r = 0.50) of the overall QOL, level of independence and spirituality, and the law correlations (r = 0.23, r = 0.29, r = 0.29) of environment, social relationships and psychological domains among the rural population. Internal consistency reliability assessment involves examining of the agreement between two or more measures of the same domain; it refers to the extent to which the items are interrelated. Cronbach's alpha coefficient is one of the methods comprising internal consistency. Very high correlations were estimated

Table 1. **Sociodemographic characteristics among men and women**

| Characteristics | Men, n = 150 | | Women, n = 263 | |
|---|---|---|---|---|
| | n | % | n | % |
| **Age, years** | | | | |
| <35 | 8 | 5.3 | 8 | 3.0 |
| 35–44 | 51 | 34.0 | 81 | 30.8 |
| 45–54 | 59 | 39.3 | 89 | 33.8 |
| 55–64 | 28 | 18.7 | 62 | 23.6 |
| ≥65 | 4 | 2.7 | 23 | 8.7 |
| **Marital status** | | | | |
| Married / cohabiting | 106 | 72.1 | 185 | 71.4 |
| Single / divorced / widowed | 41 | 27.9 | 74 | 28.6 |
| Missing data | 3 | 2.0 | 4 | 1.5 |
| **Education** | | | | |
| University | 8 | 5.4 | 29 | 11.2* |
| Vocational (apprenticeship) | 37 | 24.8 | 96 | 37.2** |
| Secondary | 67 | 45.0 | 87 | 33.7* |
| Primary / incomplete secondary | 37 | 24.8 | 46 | 17.8 |
| Missing data | 1 | 0.7 | 5 | 1.9 |
| **Income[1]** | | | | |
| 1 quartile >500 Lt | 27 | 19.1 | 46 | 18.8 |
| 2 quartile 370–500 Lt | 43 | 30.5 | 79 | 32.2 |
| 3 quartile 210–360 Lt | 33 | 23.4 | 57 | 23.3 |
| 4 quartile ≤200 Lt | 38 | 27.0 | 63 | 25.7 |
| Missing data | 9 | 6.0 | 18 | 6.8 |
| **Social status** | | | | |
| Employed | 78 | 54.9 | 129 | 50.8 |
| Unemployed | 47 | 33.1 | 75 | 29.5 |
| Retired | 17 | 12.0 | 50 | 19.7* |
| Missing data | 8 | 5.3 | 9 | 3.4 |

[1] – mean income in Lt for each person of the household per month.

Table 2. **Psychometric evaluation of the WHOQOL-100 domains among men and women**

| The WHOQOL-100 domains | No. of items | Convergent validity[1] | | | Divergent validity[2] | | | Cronbach's α |
|---|---|---|---|---|---|---|---|---|
| | | r | min. | max. | r | min. | max. | |
| Overall quality of life | 4 | 0.53 | 0.37 | 0.81 | 0.29 | –0.04 | 0.61 | 0.82 |
| Physical | 12 | 0.32 | 0.06 | 0.81 | 0.19 | –0.14 | 0.61 | 0.85 |
| Psychological | 20 | 0.29 | 0.03 | 0.74 | 0.22 | –0.12 | 0.65 | 0.89 |
| Level of independence | 16 | 0.50 | 0.26 | 0.80 | 0.24 | –0.09 | 0.65 | 0.94 |
| Social relationships | 12 | 0.29 | –0.05 | 0.61 | 0.20 | –0.13 | 0.54 | 0.82 |
| Environment | 32 | 0.23 | –0.23 | 0.78 | 0.19 | –0.12 | 0.48 | 0.90 |
| Spirituality | 4 | 0.50 | 0.38 | 0.62 | 0.20 | –0.14 | 0.46 | 0.80 |

[1] – mean Pearson correlations between items in their own domains.

[2] – mean Pearson correlations between items and domains other than in their own domains.

min., max. – minimal and maximal Pearson correlation values.

Table 3. **Factor loadings from the rotated factor structure of the WHOQOL-100**

| The WHOQOL-100 facets | Components | | | | |
|---|---|---|---|---|---|
| | I | II | III | IV | V |
| Pain and discomfort | | 0.62 | | | |
| Energy and fatigue | | 0.74 | | | |
| Sleep and rest | | 0.55 | | | |
| Positive feelings | 0.75 | | | | |
| Thinking, learning and memory | 0.47 | | | 0.47 | |
| Self-esteem | 0.60 | | | 0.49 | |
| Body image and appearance | | | | 0.70 | |
| Negative feelings | | | | 0.66 | |
| Mobility | | 0.73 | | | |
| Activities of daily living | | 0.71 | | | |
| Dependence on medication | | 0.84 | | | |
| Working capacity | | 0.67 | | | |
| Personal relationships | | | | | 0.46 |
| Social support | 0.53 | | | | |
| Sexual activity | | | | | 0.68 |
| Physical safety and security | | | 0.58 | | |
| Home environment | 0.60 | | 0.44 | | |
| Financial resources | 0.44 | | 0.56 | | |
| Health and social care | 0.48 | | | | |
| Acquisition of new information | 0.65 | | | | |
| Leisure | 0.71 | | | | |
| Physical environment | | | 0.61 | | |
| Transport | | | 0.70 | | |
| Spirituality/religion/personal beliefs | 0.73 | | | | |

**Note.** Principal component analysis with varimax rotation. Factor loadings <0.4 are suppressed. Original domains of the WHOQOL-100 are separated. I – psychological domain and environment, II – physical domain and level of independence, III – environment, IV – psychological domain, V – social relationships.

Table 4. **Comparison of the WHOQOL-100 scores between men and women**

| The WHOQOL-100 domains | Men m (95% CI) | Women m (95% CI) | ANOVA | |
|---|---|---|---|---|
| | | | F test | p |
| Overall quality of life | 54.6 (52.0–57.2) | 53.9 (52.0–55.8) | 0.2 | 0.648 |
| Physical | 61.1 (59.0–63.3) | 57.4 (55.6–59.1) | 7.0 | 0.009 |
| Psychological | 61.0 (59.0–63.0) | 58.4 (57.0–59.7) | 4.7 | 0.03 |
| Level of independence | 69.7 (66.6–72.8) | 67.2 (65.0–69.5) | 1.6 | 0.201 |
| Social relationships | 61.0 (59.0–63.1) | 60.8 (59.1–62.5) | 0.03 | 0.86 |
| Environment | 56.5 (54.6–58.3) | 54.8 (53.5–56.1) | 2.1 | 0.146 |
| Spirituality | 51.8 (49.2–54.4) | 52.1 (50.1–54.0) | 0.02 | 0.876 |

m – mean of the standard scores of the WHOQOL-100, CI – confidence interval.

Table 5. **Comparison of the WHOQOL-100 scores between men and women controlling for age (univariate general linear model[1])**

| The WHOQOL-100 domains | Men m (95% CI) | Women m (95% CI) | F test | p |
|---|---|---|---|---|
| Overall quality of life | 54.0 (50.0–58.1) | 53.6 (50.8–56.4) | 0.03 | 0.868 |
| Physical | 62.7 (59.1–66.3) | 58.4 (55.9–60.8) | 3.7 | 0.054 |
| Psychological | 62.2 (59.2–65.3) | 59.0 (56.9–61.1) | 2.9 | 0.089 |
| Level of independence | 69.9 (65.1–74.7) | 68.0 (64.8–71.3) | 0.4 | 0.521 |
| Social relationships | 62.9 (59.4–66.4) | 61.5 (59.2–63.9) | 0.4 | 0.534 |
| Environment | 57.5 (54.6–60.5) | 54.6 (52.6–56.6) | 2.7 | 0.103 |
| Spirituality | 52.1 (47.9–56.4) | 52.5 (49.6–55.4) | 0.02 | 0.886 |

[1] – dependent variable – each of the WHOQOL-100 domains, fixed factors – gender and age.

m – means of the scores of body image and appearance facet; CI – confidence intervals.

Table 6. **Comparison of the WHOQOL-100 scores by age groups**

**Men**

| The WHOQOL-100 domains | 24–35 years m (SD) | 35–44 years m (SD) | 45–54 years m (SD) | 55–64 years m (SD) | 65–70 years m (SD) | ANOVA F | p |
|---|---|---|---|---|---|---|---|
| Overall quality of life | 61.7 (13.5) | 56.4 (15.5) | 55.8 (15.1) | 47.8 (17.4) | 48.4 (13.9) | 2.2 | 0.076 |
| Physical | 69.3 (12.6) | 60.7 (11.3) | 62.0 (14.1) | 57.4 (14.9) | 64.1 (17.0) | 1.4 | 0.23 |
| Psychological | 67.0 (14.2) | 61.7 (13.1) | 60.0 (11.3) | 59.6 (13.6) | 62.8 (9.9) | 0.7 | 0.59 |
| Level of independence | 84.2 (14.2) | 71.5 (15.4) | 70.6 (19.7) | 61.4 (22.4) | 61.7 (19.3) | 2.9 | 0.023 |
| Social relationships | 71.3 (8.6) | 61.6 (12.6) | 60.4 (11.4) | 58.1 (15.0) | 63.0 (11.6) | 1.8 | 0.125 |
| Environment | 63.3 (5.8) | 56.8 (11.7) | 55.7 (11.2) | 55.4 (11.8) | 56.4 (12.5) | 0.9 | 0.48 |
| Spirituality | 62.5 (10.6) | 54.3 (17.5) | 47.9 (15.5) | 53.8 (15.7) | 42.2 (14.8) | 2.5 | 0.042 |

m – mean of the standard scores of the WHOQOL-100, SD – standard deviation.

**Women**

| The WHOQOL-100 domains | 26–35 years m (SD) | 35–44 years m (SD) | 45–54 years m (SD) | 55–64 years m (SD) | 65–77 years m (SD) | ANOVA F | p |
|---|---|---|---|---|---|---|---|
| Overall quality of life | 57.0 (22.0) | 57.3 (12.8) | 51.7 (17.0) | 54.4 (15.6) | 47.6 (13.9) | 2.6 | 0.04 |
| Physical | 69.5 (5.4) | 60.3 (11.7) | 58.1 (15.4) | 53.4 (14.2) | 50.7 (15.4) | 5.1 | 0.001 |
| Psychological | 64.8 (8.7) | 58.8 (10.6) | 58.1 (11.5) | 58.7 (10.6) | 54.5 (14.5) | 1.4 | 0.234 |
| Level of independence | 82.0 (8.4) | 73.7 (13.7) | 66.1 (20.2) | 63.0 (18.0) | 55.3 (21.8) | 7.6 | 0.0001 |
| Social relationships | 69.8 (11.2) | 64.4 (13.2) | 58.6 (13.6) | 60.3 (13.6) | 54.6 (16.2) | 4.0 | 0.003 |
| Environment | 56.4 (11.4) | 55.9 (9.5) | 54.1 (12.7) | 55.4 (9.7) | 51.1 (11.8) | 1.0 | 0.385 |
| Spirituality | 57.8 (17.3) | 53.9 (15.4) | 52.7 (17.4) | 49.0 (14.1) | 49.2 (18.7) | 1.3 | 0.279 |

m – mean of the standard scores of the WHOQOL-100, SD – standard deviation.

in the following domains: the level of independence (r = 0.94), environment (r = 0.90), and psychological one (r = 0.89). Factor analysis is one of the most important methods for establishing construct validity. Factor loadings of the questionnaire WHOQOL-100 and five components displayed high correlations. Since the qualitative research methods are the key means of data collection, very high properties of validity and reliability approved usage of the WHOQOL-100 among the rural population. Comparison of the WHOQOL-100 scores between men and women revealed the fact that men scored higher in the physical and psychological domains. The results of the WHOQOL-100 scores by age revealed lowering scores in the level of independence and spirituality among men and overall QOL, physical, level of independence and social relationships among women. These results support other studies in suggesting that sociodemographic, lifestyle factors may explain a substantial part of the differences between women and men in certain QOL dimensions (5–7). Some of these factors, such as the lower education level and the higher frequency of sedentary lifestyles and obesity are more prevalent among women than among men (8, 9). Results among elderly women showed that the main factors influencing the QOL were chronic diseases, age, hospitalization, education, income, marital status (10–12). Population characterized by older age, lower education, no spouse and low income should be viewed as the priority in case of paying attention to and their special difficulties ought to be fully considered. Scores for physical function, physical and emotional role, general health, social functioning and mental health decreased significantly with age in postmenopausal women (13). Thus rural populations are primarily in need of public health care in the postmenopausal peri-

od. Tay et al. (14, 15) assessed inter-relations between indicators of health status, well being, and deprivation but material deprivation had a direct influence on both health status and QOL. Therefore, variables associated with social networks and social support were less strongly predictive of QOL when economic measures were accounted for. Material deprivation has a direct influence on both health status and QOL, although immediate sources of support are relatively well preserved. Bobak et al. (16, 17) examined whether psychosocial factors at work are related to self-rated health and QOL in post-communist countries. The results are consistent with the hypothesis, that poor health status in post-communist countries is related to dysfunction of social structures, socioeconomic deprivation, and lack of perceived control. Depression and loneliness is more frequent in females, those living alone, without studies, working in agricultural sector, with physical or psychiatric comorbidity, with higher cognitive impairment and, therefore, with a worse health status and QOL. The continuous measure of effort / reward imbalance at work and every day life is a powerful determinant of QOL in post-communist populations. Good family relations protect against assessment of poor QOL. Gilmore et al. (18) assessed that lower scores of QOL suggest that a decrease in control, arising from an increasingly political and economic situations, a reduction in material wealth and the stress of change may all have contributed to the decline of QOL. Depression is more frequent in females, those living alone, with low education, and working in agricultural sector, especially with physical or psychiatric comorbidity, accordingly with worse health status and QOL perception (19). Liu et al. (20) amplified loneliness and education importance on QOL. Social support and income were negatively

associated with loneliness, whereas education level and being single were positively associated with loneliness. Therefore, reducing the level of loneliness may be helpful in improving the quality of life for the rural population.

Limitations of the study include assessment of QOL not in rural population but among rural community only. The participation of men and women in the assessment of QOL was not high, but sufficient to show differences of QOL in age and gender. Despite this limitation acceptable levels of validity and reliability permitted to investigate assessment of psychometric properties among Lithuanian rural community. Furthermore, this is one of the first studies revealing the QOL among the Lithuanian rural community.

## CONCLUSIONS

This investigation has presented new information concerning the quality of life among the Lithuanian rural men and women for the first time. Acceptable levels of validity and reliability of the WHOQOL-100 questionnaire confirmed adaptability to estimate QOL among the rural population. Our results revealed that men scored higher than women. Comparison of the WHOQOL-100 scores by age revealed lower scores of the level of independence and spirituality among men and lower scores of the overall QOL, physical, level of independence and social relationships among women. Programs targeted at examining the relationship of QOL with sociodemographic factors, lifestyle, social network and chronic morbidity revealed important aspects of understanding QOL among the rural population.

## ACKNOWLEDGEMENTS

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## GYVENIMO KOKYBĖS ĮVERTINIMAS TARP LIETUVOS KAIMO BENDRUOMENĖS NARIŲ

*Santrauka*

**Tyrimo tikslas.** Nustatyti Gyvenimo Kokybės Pasaulio Sveikatos Organizacijos-100 (GK PSO-100) klausimyno tinkamumą įvertinant Kaltinėnų kaimo bendruomenės narių gyvenimo kokybę.

    **Tyrimo metodai.** Tiriamąjį kontingentą sudarė 2006 m. atsitiktinai atrinkti 35–65 m. 150 vyrų ir 263 moterys – Kaltinėnų kaimo bendruomenės nariai. Kiekvienas tiriamasis asmuo savarankiškai užpildė GK PSO-100 klausimyną. Klausimyno pagrįstumas ir vidinis stabilumas buvo įvertintas Pirsono koreliacijos koeficientais ir Kronbacho alfa rodikliais, kurių patikimumas leido klausimyną naudoti kaimo bendruomenės nariams. Kiekvienos užpildyto klausimyno srities atsakymų variantai buvo perskaičiuoti į standartizuotus balus (minimalus galimas balų skaičius 0, maksimalus 100). Kaizerio-Mejerio-Olkino testas leido taikyti faktorinę analizę.

    **Rezultatai.** Vertinant GK PSO-100 klausimyno pagrįstumą, stipriausiai tarpusavyje buvo susiję nepriklausomumo ir dvasingumo srities klausimai. Kronbacho alfa rodikliai rodo labai stiprų nepriklausomumo (0,94) ir aplinkos sričių vidinį stabilumą (0,90). Vyrai geriau nei moterys vertino fizinę ir psichologinę GK (atitinkamai 61,1 ± 13,4 ir 57,4 ± 14,3, p < 0,009; 61,0 ± 12,5 ir 58,4 ± 11,3, p < 0,03). Amžiaus įtaka tarp vyrų išryškėjo vertinant GK nepriklausomumo ir dvasingumo sritis, tarp moterų – vertinant bendrąją GK, fizinę, nepriklausomumo ir socialinių santykių sritis.

    **Išvados.** Nustatytas pakankamas GK PSO-100 klausimyno pagrįstumas ir matavimo stabilumas patvirtina, kad klausimynas tinkamas kaimo bendruomenės GK įvertinti. Vyresnio amžiaus vyrai blogiau vertino GK nepriklausomumo ir dvasingumo sritis, moterys – fizinę, nepriklausomumo ir socialinių santykių sritis.

    **Raktažodžiai:** GK PSO-100 klausimynas, kaimo gyventojai, gyvenimo kokybė, pagrįstumas, stabilumas