The quality of life among the elderly people in Sarawak

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Abstract
The aim of the study is to assess the quality of life and its related factors among the elderly population in Sarawak. A quantitative research has been conducted in the form of survey research by distributing WHOQOL-BREF questionnaire. The study was conducted among the elderly people aged 60 years and above who are living in Sarawak. The sample size of the study was 130 participants that were obtained through snowballing sampling. The data were analysed using Pearson Correlation which was to find out the relationship between each domain and the quality of life of the elderly people in Sarawak. The results obtained shows that the mean score of WHOQOL-BREF was 90.17 whereby the mean scores of the domain environment score the highest among the four domains. In conclusion, the overall score of the quality of life of the elderly people in Sarawak was average.

Keywords: Quality of life, elderly

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Introduction
Ageing is an unavoidable developmental event bringing several changes in the physical, psychological, hormonal and the social conditions (Briley et al., 2019; Catré, Lopes, Cabrita, & Viana, 2014). These changes are expected to affect the quality of life (QOL) of the elderly. As life anticipation growing continuously, one of the greatest obstacles of public health is to enhance the quality of later years of life. In developing countries, demographic transition results in increasing life expectancy and increase in proportion of elderly population in near future (Prabowo, 2020). In view of the above, it is imperative to analyse the QOL and its related factors among this vulnerable population so that effective measures to improve the QOL can be implemented at community level. (Mafauzy, 2000) stated that the number of Malaysians aged 60 years and above is estimated to be 1.4 million and is estimated to increase to 3.3 million in the year 2020. The percentage of the population that is 60 years and over has also increased over the years which are 5.2% in 1970, 5.7% in 1990 and 6.3% in the year 2000. This percentage is expected to be 9.8% of the population in year 2020. Between 1990 and 2020, the population of Malaysia is estimated to increase from 18.4 million to 33.3 million which is an increase of 80%. The aged population however, is expected to increase from 1.05 million in 1990 to 3.26 million over the same period, an increase of 210%. In addition to an increase in the aged population, the aged are also living longer as evidenced by an increase in life expectancy (Rambod, Ghodsbin, & Moradi, 2020).

Longevity has inclined significantly in the last few decades mainly due to the socio-economic and health care development (Praveen & Rani, 2016). These factors are responsible for the higher numerical presence of elderly people leading to change in age structure, and a higher dependency ratio. In this moment, we need to reconsider the quality of life of elderly people. The life of elderly becomes more difficult when problems related to fulfilment of basic requirements such as social relations, personal care, nutrition and accommodation are added to old age health and problems (Neven et al., 2018; Peng, Zhang, Sun, & Chen, 2015).

Praveen & Rani (2016) stated that quality of life for elderly person has become gradually more important as an outcome in public health research. QOL was found to be associated with a set of socio-demographic variables including age, marital status, educational level, and earnings. Aged individuals are liable to a variety of chronic morbidities and thus disability associated with them. Perceived morbidity and disability...
could unfavourably influence on QOL in their subsequent of life lived. While study on QOL among elderly population is infrequent within this country, it is necessary to be assessed in order to address, plan and implement appropriate and cost-effective strategies at local community. Therefore, this study aimed to assess the quality of life and its related factors among the elderly population in Sarawak (Rambod, et al., 2020).

The complication of the meaning of the concept of ageing, the nature of age-related health problems, the current trend of population ageing, and the current socio-economic situation of the country pose new challenges in the care and well-being of the elderly persons. These factors might have negative or positive impact on the quality of life of the geriatric population and influence their perceptions about the ageing phenomenon. Governments and health professionals are challenged to develop programs and interventions that would enable the elderly to enhance or maintain their quality of life. However, such programs and interventions should be based on the lived experiences and views of the elderly (Dawidowicz, Zysk, Figurska, Żróbek, & Kotnarowska, 2020). Steptoe, Deaton, & Stone, (2015) stated that psychological wellbeing and health are closely linked at older ages. There are three aspects of psychological wellbeing can be prominent which are life satisfaction, emotion wellbeing, and sense of purpose and meaning in life. The relationship between physical health and subjective wellbeing is functioning in two directions.

Furthermore, wellbeing may also have a protective role in health maintenance. Wellbeing of the elderly is important, and there is suggestive evidence that positive hedonic states, life evaluation, and eudemonic wellbeing are relevant to health and quality of life as people age. Health care systems should be concerned not only with illness and disability, but with supporting methods of improving positive psychological states. Henceforth, by assessing the QOL among the elderly, intervention may be developed in improving the psychological states of the elder people. Moreover, there is no solid finding related to QOL among elderly in Sarawak (Hassan, Jaafar, Ariffin, Samah, & Jaafar, 2013). Therefore, the objective of the research was to identify how the four domains of physical health, psychological, social relationships and environment affect the quality of life of the elderly in Sarawak.

Method

Quantitative approach in the form of survey research design has been utilised to conduct the study (Logsdon & Chaubey, 2013). Surveys results were measured by using questionnaires. Based on this research, the population that the researcher targeted were individual aged 60 years and above that live in Sarawak. Due to large population of people in Sarawak, it is impossible to include every individual aged 60 years and above in this research. Therefore, snowballing sampling helps the researcher to get readily available respondents at a particular area and time. The sample size that was required to participate in this study was 130 participants. The instrument that was used to collect the relevant data of the study is WHOQOL-BREF. The WHOQOL-BREF contains a total of 26 questions whereby it is to provide a broad and comprehensive assessment, one item from each of the 24 facets contained in the WHOQOL-100 has been included. Besides, there are two items from the overall quality of Life and General Health facet have been included. Pilot study was conducted upon at least 30 elderly people in any area of Sarawak.

The questionnaire consists of Part I which is demography, Part II which is the Overall quality of Life and General Health and Part III which consists of questions regarding four domains of quality of life. The instrument will be translated into Malay and back to English to check the reliability. Then, the questionnaires were distributed to 30 respondents to gain the data for reliability checking. The results of the pilot study were used to check by analysing the reliability of Cronbach’s alpha. Based on the pilot study, the Cronbach’s alpha of the questionaire was $\alpha = 0.708$ which mean the internal consistency of the questionnaire was acceptable. Pearson Correlation Test was used to establish the relationship between mean scores for each domain. The mean scores of all the domain were compared to determine which domain affect the most to the quality of life among the elderly in Sarawak. The statistical tests were conducted using Statistical Package for the Social Sciences (SPSS) software.

Results and discussion

The research was conducted in Kuching and Kota Samarahan, Sarawak. The total respondents that has participated in this research are 130. As shown in Table 1, there were 50% respondents of male and female respectively. 63.1% of the respondents were aged 60-69, 31.5% were aged 70-79, and 5.4% were aged 80-89, which mean majority of the respondents were aged 60-69.
Table 1 <Demographic Profile of Respondents>

| Variables         | Frequency (N) | Percentage (%) |
|-------------------|---------------|----------------|
| Gender            |               |                |
| Male              | 65            | 50             |
| Female            | 65            | 50             |
| Age               |               |                |
| 60-69             | 82            | 63.1           |
| 70-79             | 41            | 31.5           |
| 80-89             | 7             | 5.4            |
| Ethnicity         |               |                |
| Malay             | 24            | 18.5           |
| Chinese           | 31            | 23.8           |
| Indian            | 3             | 2.3            |
| Iban              | 23            | 17.7           |
| Bidayuh           | 24            | 18.5           |
| Other             | 25            | 19.2           |
| Religion          |               |                |
| Islam             | 38            | 29.2           |
| Christian         | 71            | 54.6           |
| Buddha            | 19            | 14.6           |
| Hindu             | 2             | 1.5            |
| Marital status    |               |                |
| With partner      | 80            | 61.5           |
| Single            | 1             | 0.8            |
| Widowed           | 44            | 33.8           |
| Separated         | 5             | 3.8            |
| Receive formal education | |                |
| Yes               | 41            | 31.5           |
| No                | 89            | 68.5           |
| Working status    |               |                |
| Yes               | 12            | 9.2            |
| No                | 118           | 90.8           |

Table 1 shows that the ethnicities of the respondents were Malay (18.5%), Chinese (23.8%), Indian (2.3%), Iban (17.7%), Bidayuh (18.5%) and a group of other Sarawak ethnic (19.2%). Majority of the respondents practised Christianity with the percentage of 54.6%. It was noted that 61.5% of the respondents are still living with partner while the rest are single, widowed and separated. 68.5% of the respondents does not receive formal education meanwhile 9.2% are still working.

For more Table 2 will explain that the Cronbach’s alpha of the research was =0.890, which mean the internal consistency of the questionnaire is good (Coelho-Medeiros et al., 2019). Based on the analysis, Table 2 shown that 64.6% of the respondents were satisfied with their quality of life.
### Table 2 <Satisfaction of Elderly People in Sarawak on Overall Quality of Life>

| Quality of Life | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|---------|---------------|--------------------|
| Valid          |           |         |               |                    |
| Dissatisfied   | 11        | 8.5     | 8.5           | 8.5                |
| Neutral        | 25        | 19.2    | 19.2          | 27.7               |
| Satisfied      | 84        | 64.6    | 64.6          | 92.3               |
| Very Satisfied | 10        | 7.7     | 7.7           | 100.0              |
| Total          | 130       | 100.0   | 100.0         |                    |

### Table 3 <Satisfaction of Elderly People in Sarawak on Overall Health>

| Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|---------|---------------|--------------------|
| Valid     |         |               |                    |
| Very Dissatisfied | 3   | 2.3           | 2.3                |
| Dissatisfied        | 37   | 28.5          | 30.8               |
| Neutral            | 7    | 5.4           | 36.2               |
| Satisfied          | 77   | 59.2          | 95.4               |
| Very Satisfied     | 6    | 4.6           | 100.0              |
| Total              | 130  | 100.0         | 100.0              |

Table 3 shown that 59.2% were satisfied with their current overall health. However, 28.5% of the respondents were dissatisfied with their overall health.

### Table 4 <Baseline Data of Overall WHOQOL-BREF Questionnaire>

| Scale Statistics | Mean | Variance | Std. Deviation | N of Items |
|------------------|------|----------|----------------|------------|
|                  | 90.17| 128.236  | 11.324         | 26         |

Based on Table 4, the mean scores for the total WHOQOL-BREF score was 90.17±11.32. The highest mean score was the environment domain of 117.45±17.06 meanwhile physical domain and psychological domain scores 87.88±20.95 and 86.58±14.82 respectively. The social relationship domain scores the less mean scores of 43.51±7.98.

After the mean scores of the four domains were calculated, Pearson correlation This will explain by Table 5. Test was used to analyse and investigate the relationship of each domain to the score of overall quality of life. The p-value of four domains of physical, psychological, social relationships and environment were p=0.000. The p-value is less than 0.01. Therefore, all the domains have significant relationship to quality of life. Hence, the null hypothesis is rejected. Besides, the p-value of quality of life and overall health is also p=0.000. In results, overall health has significant relationship to the quality of life of the elderly people in Sarawak. The Pearson correlation coefficient, r, indicates the association of the variable. The higher the value of r, the stronger the association of the two variables. The r-value of the Pearson correlation of quality of life and overall health are r=0.764. Based on Table 5, environment domain and psychological domain score higher r-value which were r=0.749 and r=0.689 respectively than the physical domain and social relationship domain with the score of r=0.562 and 0.471 respectively. Between all the
four domains, it was noted that the environment domain has the strongest association to quality of life among the elderly people in Sarawak.

Table 5 <Baseline Data of Four Domains of Quality of Life>

| Descriptive Statistics          | N   | Minimum | Maximum | Mean   | Std. Deviation |
|--------------------------------|-----|---------|---------|--------|----------------|
| Domain_Physical                | 130 | 40.00   | 140.00  | 87.8769| 20.95363       |
| Domain_Psychological           | 130 | 28.00   | 120.00  | 86.5846| 14.82392       |
| Domain_SocialRelationship      | 130 | 16.00   | 60.00   | 43.5077| 7.98472        |
| Domain_Environment             | 130 | 56.00   | 156.00  | 117.4462| 17.05807       |
| Valid N (listwise)             | 130 |         |         |        |                |

The comparison of the p-value and r-value of the domain can be referred to Table 6.

Table 6 <Association Between Quality of Life and the Variables>

| Variables               | Overall health | Physical | Psychological | Social relationships | Environment |
|-------------------------|----------------|----------|---------------|----------------------|-------------|
| Quality of life         | p-value        | 0.000    | 0.000         | 0.000                | 0.000       |
|                         | r-value        | 0.764    | 0.562         | 0.689                | 0.471       |

* Correlation is significant at the 0.01 level

Based on the results, the overall score for QOL of the elderly people are $\bar{x} = 3.72$, which mean moderate. The results showed that the mean score of the four domains are generally high particularly the domain of physical, psychological and environment. Relatively, this study showed that the scores of the domains are higher compare to the study conducted in rural area of Sabah and urban area of Penang except for the Domain Social. The differences in the result of the study and other studies might be attributed to the difference in pattern of associated factors as it can be affected by the life events and cultural norms of a society or community.

In Sarawak, the Domain Environment score the highest mean compare to rural area of Sabah (Yin et al., 2017) with mean score of 68.29 and urban area of Penang (Khan & Tahir, 2014) with mean score of 59.90. These results may be due to the factors of the environment such as the physical environment, home environment, accessibility and quality of health and social care, and acquiring of new information. For example, the geographical factor itself are differ where in Kuching, even though the surrounding is not as refreshing as in rural area, however the facilities for elder people are sufficient. Comparing to Penang, Sarawak may be a developing state, but it is far more of having less air and noise pollution and traffic. Hence, it provides a comfortable place for the elderly people for living. This surrounding contributing to the score of the Domain Environment among the elderly people. The quality and delivery of services to the community play a vital role in allowing more elderly people to remain in their homes and maintain their independence instead of weakening physical and mental conditions (Nurwita, Susanto, & Rasni, 2020). According to Hagen (2013) mentioned that home and community-based services should be developed so that they are well-organized with each other while providing different levels of care that is suitable according to the needs of the individual.

Based on the r-value in Table 1.3 in Chapter 4, among the four domains, Domain Environment have the strongest relationship to quality of life. This means that environment affect the most to the QOL of elderly people in Sarawak. During data collection process, few respondents agreed that the environment of their living affect the most to the quality of life. It was shared that the environment plays a crucial role in people's physical, mental and social well-being (Arora, 2020). Williams (2006) agreed that the environment is omnipresent whereby it is everything and anything external to an individual that might have an impact
on how a person think, feel, and act. This statement supported the result of the study as the higher score of the Domain Environment resulting a higher score of Domain Physical and Domain Psychological. The mean scores for Domain Physical and Psychological are almost the same as physical health does contributing to the psychological health. Surtees et al. (2008) stated that there is a strong link has been found between psychological and physical health. Mental health may affect individuals’ decision making process, whereby it will impair the ability to access information about health especially on prevention and on the quality of healthcare providers. Therefore, this will be bringing impact on their physical health (Mani, Mullainathan, Shafir, & Zhao, 2013). It was found that physical activity is negatively associated with depression/anxiety disorders and poor physical health outcomes (Hegberg & Tone, 2015). Clegg, Barber, Young, Foster, & Iliffe (2012) stated that systematic reviews found strong evidence for positive effects of exercising on both mental and physical health outcomes for older people.

Domain Social Relationship score least as most of the respondents did share that they mostly socialize between family members or spouses. Social activity has become a limit due to health condition they might have. Cornwell, Laumann, & Schumm (2008) mentioned that with advancing age, the size of the social network of the elderly tend to be smaller. The death of people close to the elderly person, health problems, children leaving home, events that deprive the elderly of their social networks at work, and the theory of social-emotional selectivity explained the decline of the size of social networks with age. This was supported by Fung, Carstensen, & Lang (2001) as such a theory hypothesize that elderly people become more aware of the limitations of the future time available to them and are motivated to be more selective in choosing social partners and prefer emotionally significant relationships over more minor ones. Generally, the size of social networks has been positively associated with QOL (Litwin & Stoeckel, 2014). Nonetheless, some investigations carried out in European countries showed that there is no association between social network and QOL (Bowling & Gabriel, 2007). This explained and supported on the result of the low r-value of the Domain Social Relationships which is r=0.471 that is less than 0.5 which mean Domain Social Relationships has no association to the QOL of the elderly people in Sarawak.

Conclusion

In a nutshell, the domain of physical, psychological, social relationships and environment have relationship to the quality of life of the elderly people in Sarawak. It was also found out that the Domain Environment contribute the most or have the strongest association to the quality of life of the elderly people in Sarawak. Moreover, stated that the environment affect the other domains. Henceforth, it is important to maintain a good environment or enhance it better to ensure the well-being of the elderly people in Sarawak.

This research may contribute data to the assessment of the condition that is directly related with quality of life, whereby the government may focus on improving the environment that is elder-friendly to the society in order to maintain the well-being of the elderly people. This research may provide contribution on data to Jabatan Kebajikan Masyarakat Malaysia in order to achieve “Matlamat Dasar Warga Emas Negara” that is to empower individuals, families and communities by providing efficient and effective services that are senior citizen friendly and developing an environment that helps senior citizens to live in prosperity. For counsellor, this research provide knowledge in helping to develop intervention in dealing with the elderly people especially in coping with the development of the surrounding, assessing the process of ageing and providing the social support to the elderly people.

For recommendations, a further research should measure QOL and Domain Environment at multiple time points during old age. Besides, a further study on the factors of each domain can be done so that a more detail and precise data can be obtained to enable more efficient intervention can be developed through the data obtain. Moreover, the quality of life of the elderly people and the sociodemographic factors such as marital status, working status and the acceptance of formal education or not should be further investigated. The QOL of the elderly people are multidimensional and is a subjective perception of the individual and experiences. Henceforth, the study of QOL should be done from time to time as the QOL of the elderly people may be change following the development of the surrounding.

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