Relationship between nutritional status and family support with quality of life elderly

Astri Dyah Kustiar¹, Eti Poncorini Pamungkasari², Selfi Handayani³

ABSTRACT

Background: The quality of life elderly in the physical domain will decrease which will lead to changes in nutritional status. Nutritional status can prevent or defend the body from various chronic and acute diseases, and it also plays a role in the healing process. Family support is needed to improve the quality of life elderly to improve health and reduce morbidity and mortality. This study analyzes the relationship between nutritional status and family support with the quality of life elderly.

Method: This type of research is analytical observational with a cross-sectional design. The sample was taken by purposive sampling, namely 145 people over 60 years old. The sampling technique used was cluster sampling which took samples from health centers, namely urban and rural areas. The instruments used were family support questionnaires, WHOQOL-BREF questionnaires, and weight and height measurements. This research analysis used Chi-Square.

Result: There was no significant relationship between nutritional status and quality of life elderly (p = 0.597), and there was no significant relationship between family support and quality of life elderly (p = 0.153).

Conclusion: There is no relationship between nutritional status and family support with quality of life of the elderly.

Keywords: anthropometry, body mass index, family members, overweight.

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INTRODUCTION

The elderly population in Indonesia is 25.64 million people (9.60%), according to the 2019 Elderly Population Statistics data. Central Java Province has the second-highest elderly population at 13.36% in Indonesia, after Yogyakarta at 14.50%. Sragen Regency has an elderly percentage of 16.59%, which has exceeded 9.6%.¹ Research on the quality of life elderly at the Bandarharjo Public Health Center in Semarang City was found to be in the poor (72.9%) and good (27.1%) categories.² Nutritional status, physical activity, physical condition, psychology, independence, social interaction, and family support are factors that influence the quality of life elderly.³

Assessment of the quality of life of the elderly in the physical domain will decrease, which will lead to changes in nutritional status.⁴ Nutritional status can prevent or defend the body from various chronic and acute diseases. It also plays a role in the healing process. Changes that occur in the body can affect a person’s nutritional status over time. Malnutrition in the elderly is caused by a decrease in the immune system, an increased risk of infection, longer wound healing, muscle weakness that can fall and fractures, as well as a decrease in appetite. Malnutrition in the form of overnutrition and undernutrition generally occurs in the elderly.⁵

More nutrition can trigger degenerative diseases such as coronary heart disease, hypertension, and diabetes mellitus in the elderly. Undernutrition is associated with decreased functional ability and increased mortality in the elderly.⁶ The prevalence of nutritional status in Central Java Province has an underweight category of 12.47% and 29.48% over nutrition, aged 60-64 years, while those aged over 65 years have a prevalence of underweight 22.12% and overweight 17.94%.⁷ Research at the Jogonalan I health center showed that nutritional status had a significant relationship with the quality of life elderly. The needs of the elderly are fulfilled, assisted by their families, but the activities they do are few so that the elderly have more nutritional status with a good quality of life.⁸ Family support is important in helping individuals solve problems. Family support also increases self-confidence and motivation when facing problems and increases life satisfaction.⁹

Families can involve the elderly to make decisions and solve problems together, provide space and time for family members, provide freedom in physical and mental changes.¹⁰ Family support is needed to improve the quality of life elderly to improve health and reduce morbidity and mortality.¹⁰ Research conducted at PTSW Budi Sejahtera Banjarbaru stated that there is a relationship between family support and the quality of life of the elderly. The quality of life elderly increases due to the support provided by good families.
So that the elderly feel themselves cared for and meet their needs while they were living in the orphanage and being visited by their family. Then, the research will be conducted to analyze the relationship between nutritional status and family support for the quality of life elderly.

**METHOD**

This study uses observational analysis with a cross-sectional design. The study was done in the month of March - April 2021 at the District Health Center Sragen. The population used is old age; more than 60 years old, as many as 145 people were taken with the purposive sampling technique. The sampling technique used cluster sampling representing Urban Health Centers (Sragen and Sidoharjo Health Centers) and Rural Health Centers (Health Centers Masaran 1 and 2). The data measured were gender, age, height, weight, family support, and quality of life elderly. The questionnaire used is family support and quality of life elderly. Criteria inclusion in election subject that is stay together family elderly, ready becomes sample in research, elderly aged more from 60 years old to above, can listen, read and write. Whereas criteria exclusion that is currently sick or treated at home, sick suffered a stroke, and sick moment study walk.

Nutritional status data obtained from calculation Body Mass Index (BMI) obtained from results measurement anthropometry that is heavy body and height. Bodyweight was measured using a digital scale and height using a microtoise. BMI is an indicator that can be used for assessing nutritional status with advantages and disadvantages weight. Nutritional status categorized as Not enough if BMI < 18.5, Normal if BMI 18.5-22.9, More if BMI 23-24.9, Obesity I if BMI 25 – 29.9, and Obesity II if BMI 30.

Family support data were obtained from interviews using a questionnaire. The questionnaire contains 12 questions with yes or no answers. Assessment of family support was obtained from the total number of respondents’ answers divided by the total multiplied by 100% so that a cut of a point was obtained, namely the less category with a score of 60 and the good category with a value of more than 60.

**RESULT**

Participating seniors as many as 145 people in this study. Characteristics subject a little more many males (52.4%) than women (47.6%). Age the most elderly 60-70 years old by 109 people (75.2%). Nutritional status of the elderly obtained results in the most normal category with 49 people (33.8%) and more with 43 people (29.7%). Support family part big including not enough as many as 129 people (89%) and quality life elderly dominated category good of 104 people (71.7 %) (Table 1).

The result of statistical analysis is there is no significant relationship between nutritional status and quality of life elderly (p = 0.204), and there is no significant relationship between family support and quality of life elderly (p = 0.204) (Table 2).

**DISCUSSION**

Nutritional status in the higher category will cause degenerative diseases such as coronary heart disease, hypertension, and diabetes mellitus in the elderly. Meanwhile, undernutrition will be associated with decreased functional ability and increased mortality in the elderly. In this study,
Table 2. The relationship between nutritional status and family support with the quality of life elderly.

<table>
<thead>
<tr>
<th>Nutritional status</th>
<th>Quality of Life</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good</td>
<td>Bad</td>
</tr>
<tr>
<td>Not enough</td>
<td>N=5</td>
<td>34</td>
</tr>
<tr>
<td>Normal</td>
<td>N=37</td>
<td>25.5</td>
</tr>
<tr>
<td>More</td>
<td>N=32</td>
<td>22.1</td>
</tr>
<tr>
<td>Obesity I</td>
<td>N=27</td>
<td>18.6</td>
</tr>
<tr>
<td>Obesity II</td>
<td>N=3</td>
<td>2.1</td>
</tr>
<tr>
<td>Family support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not enough</td>
<td>N=95</td>
<td>65.5</td>
</tr>
<tr>
<td>Enough</td>
<td>N=8</td>
<td>5.5</td>
</tr>
<tr>
<td>Good</td>
<td>N=1</td>
<td>0.7</td>
</tr>
</tbody>
</table>

There was no significant relationship between nutritional status and the quality of life elderly (p= 0.382). The findings of this study are that the elderly have a good quality of life with more than 22.1% nutritional status (Table 2). The results of the interview showed that the elderly had more nutritional status because the elderly lived with their partners or family members, they no longer worked, causing little physical activity to be done, some elderly respondents received financial assistance to meet the needs of a balanced diet. The good quality of life elderly can be seen in the good nutritional status of the respondents. Meeting the needs for good nutrition can help the process of adapting to the changes experienced and can maintain the continuity of the body’s cell turnover so that it can prolong life. Nutritional status causes limitations in the activities of the elderly so that it affects the quality of life elderly in the domain of physical health. Indirect causes of nutritional problems are environmental factors, income, and the availability of information.

This study is also in line with research at Madising Na Mario Health Center, Parepare City, that there is no relationship between nutritional status and quality of life in terms of psychological health in the elderly. The number of elderly shows the ability to express their emotions, gratitude, praise, and trust can be accepted by the surrounding family. In addition, there is no relationship between nutritional status and quality of life in terms of environmental conditions in the elderly. The elderly gave many answers that lead to good living conditions. The reach of the elderly’s place of residence is not possible, but they have ways of living healthy in the surrounding environment. The elderly have the same needs in life as other family members. Elderly needs such as meeting the needs of balanced nutrition, periodic health checks, a peaceful and safe environment, socializing with everyone in the surrounding environment. These needs are needed by the elderly to be independent.

This study found that there was no significant relationship between family support and good quality of life (p = 0.204). The findings of this study showed that family support was lacking and quality of life was good at 65.5% (Table 2). The results of the interview obtained that support was lacking because family members were busy with work which made the elderly less given attention and affection. The elderly rarely tell their family members about their illness. Family members rarely accompany the elderly to health facilities. Lack of family support due to lack of communication and socialization with family. One of the factors that can affect the quality of life is social support or the support of people around, especially family. Good family support can improve the quality of life elderly. Many elderly who feel lonely because of not enough support from family even until experience dropped mental health and ultimately stress/depression.

This research is in line with research at the Puskesmas Bandarharjo stated that there was no relationship between family support and the quality of life of elderly people with hypertension. Most of the elderly live with their families, but the majority are in low-middle economic conditions so they are less knowledgeable in terms of treatment. The elderly said that the family provides informational support, such as reminding the family to check regularly at the health center, take medicine if they have an illness, and eat.

CONCLUSION

There was no significant relationship between nutritional status and the quality of life of the elderly and there was no significant relationship between family support and the quality of life of the elderly.

ETHICAL CLEARANCE

Study this has been approved by the Commission Ethics of Universitas Sebelas Maret (No.19/UN27.06.6.1/KEP/EC/2021).

CONFLICT OF INTEREST

The author declares there is no conflict of interest.

FUNDING

This study does not receive external funding.

AUTHOR CONTRIBUTION

Astri Dyah Kustiar, conceptualizing and designing studies, preparing manuscripts, collecting and reviewing data, and preparing manuscripts; Eti Poncorini Pamungkasari led data collection, helped analyze and interpret data and review manuscripts; Selfi Handayani led data collection, helped analyze and interpret data and review manuscripts.

REFERENCES

ORIGINAL ARTICLE


