



The Relationship of Education Level and Economic Status with The Use of Scraping on The Elderly Based on Transcultural Nursing

Ikha Ardianti^{1}, Errix Kristian Julianto¹*

¹STIKes Insan Cendekia Husada Bojonegoro, Bojonegoro, Indonesia

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CORRESPONDENCE

E-mail: ikhaardianti.icsada@gmail.com

A B S T R A C T

Complementary nursing and alternative medicine have been widely used by the community, one of which is scrapings. Scrapings are believed to be effective in curing symptoms of unwell in the elderly because the method is easy. It also does not require a lot of money. However, the impact of using scrapings that are carried out continuously will cause an addiction effect. Efforts to improve the health status of the elderly can be influenced by various factors, including cultural and social culture. This study aims to determine the relationship between education level and economic status with the use of scrapings on the elderly. This study employed a correlation design with a retrospective approach and observational analysis with quantitative methods. The population in this study were all the elderly in the village of Prambon Tergayang, Soko District, Tuban Regency, as many as 68 people. The sample in this study was 42 elderly who were willing to become respondents. The result showed a relationship between educational factors and the use of scrapings by the elderly. The Spearman Rho statistical test showed the p-value = 0.007. There was no relationship between economic factors and the use of scrapings by the elderly (p-value = 0.071). Research examining the effect of scrapings on the health of the elderly can be focused on as a topic for future research.

INTRODUCTION

Complementary nursing and alternative medicine have been widely used by the community, one of which is scrapings. According to the National Center of Complementary and Alternative Medicine, complementary and alternative therapies are treatments that consist of various medical practices and products that are not part of conventional medicine (Indriani, 2019). The World Health Organization (WHO) states that 75-80% of the world's population has undergone non-conventional treatment. Non-conventional treatment is a treatment that can use traditional methods such as scrapings. The minister of health of republic Indonesia explained that traditional medicine is one of the efforts to treat other ways outside of medicine and or nursing, which are widely used by the community in overcoming health problems (RI, 2003). In Asia, the use of conventional medicine is also in great demand. Several countries such as Vietnam, China, Cambodia, and Indonesia have almost the same conventional treatment, one of which is scraping, as it is called in Indonesia. In Vietnam, they call scraps Cao Gio, Cambodia calls them Goh Kyol, and in China, they call scraps Gua Sha but the Chinese use jade as a scraping tool (Triratnawati, 2010).

According to Efendi and Makhfudli (2009) scraping is a traditional method of pressing and sliding a blunt object such as a coin or spoon repeatedly on the skin's surface until a red patch appears. The survey results on research by Didik (2004), 390 respondents in the city of Solo, showed that 87% had done

scrapings, and 64% believed scrapings were very useful for colds and muscle pain. According to research conducted by Suryani and Sianturi (2013), scrapings are believed to be effective in curing symptoms of unwell in the elderly who experience physical changes as an effort to handle when they are not feeling well because the method is easy, effective, and does not require much money. However, using scrapings that are carried out continuously will cause an addiction effect so that existing health services are not used effectively by the elderly. Only now, scraping is a treatment method that has yet to have a specific policy regarding its use, although studies show that scrapings do not have a severe impact. However, using scrapings on the elderly will pose a risk to health due to physiological changes (Supadmi, 2013).

According to the World Health Organization (WHO), in 2020, the world's population aged 60 years and over will reach 900 million people. In Southeast Asia, the elderly population is 8% or around 142 million people. The number of older people in Indonesia in 2017 reached 269.9 million people, equivalent to 10.6% of the entire population of Indonesia, with the first largest number of older adults in DI Yogyakarta Province, which was 13.69%, the second Central Java Province was 12.05%, and the three East Java Provinces amounted to 11.80%. Data on the number of older adults in Surabaya in 2019 was 219,164 people (Kementerian Kesehatan Republik Indonesia, 2018). According to the East Java Population Profile (2020), the percentage of older adults in East Java has reached 5,183,447 people, or 13.06% of the total population of East Java. This figure tends to increase compared to the previous year, which was 12.64%. This shows that East Java is an area with a population structure towards an aging population. It was also stated that the highest elderly population in East Java province based on the highest order was in the Regencies of Magetan, Pacitan, Ponorogo, and Lamongan, followed by Tuban.

Efforts to improve the health status of the elderly can be influenced by various factors, including cultural and social culture. This is in accordance with the transcultural nursing theory by Leininger and R McFarland (2002), which examines nursing care based on cultural similarities and differences. The dimensions of the cultural and social structure in theory proposed by Leininger include economic and educational factors. An ethnographic study by Suryani and Sianturi (2013) showed that economic and cultural factors influenced the selection of scrapings to treat colds in a farming community in Sleman Yogyakarta. In a study conducted by Permasatasari, L. I., Lukman, M., (2014), there are several differences in the determinant factors that influence the search for traditional medicine by the Cengkareng community, including predisposing factors (age, gender, number of family members, economic status, ethnicity, religion, value of health and illness and level of education), supporting factors (health service rates), and the needs of the Cengkareng community.

In a preliminary study conducted by researchers in the elderly village of Prambon Tergayang, Soko District, Tuban Regency, on May 22, 2020, there were 9 out of 10 older adults who used scrapings as the main treatment for unwell conditions such as fever, muscle aches, aches, chills, nausea, dizziness, and

flatulence. In this case, factors related to using scrapings on the elderly still need to be investigated. Based on this, the researcher is interested in conducting a study entitled "The Relationship between Education Level and Economic Status with the Utilization of Scrapings in the Elderly Based on Transcultural Nursing in Prambon Soko Village, Kab. Tuban".

METHOD

This study employed a correlation design with a retrospective approach and observational analysis with quantitative methods. This study uses a quantitative type of research using a Cross-Sectional approach (Relationships and Associations) that emphasizes the time of measurement or observation of independent and dependent variable data only once a time. The population in this study were all the elderly in the village of Prambon Tergayang, Soko District, Tuban Regency, as many as 68 people. The sample in this study was 42 older adults in the village of Prambon Tergayang, Soko District, Tuban Regency, who were willing to be respondents. The sampling method used in this study is a non-probability sampling type, namely purposive sampling. This research was conducted in the village of Prambon Tergayang, Soko District, Tuban Regency. The collecting and processing of data used an instrument, namely the education and economics questionnaire. Data management is done using a scoring technique. Then the scoring data was analyzed to see the relationship between the problems discussed using the Pearson correlation test.

RESULT

This study's demographic characteristics described respondents' characteristics, including gender, age, occupation, religion, and ethnicity.

Table 1 The Characteristics of respondent in Prambon Tergayang Village, Soko Tuban District (N=42).

Characteristic	Total (Σ)	Percentage (%)
Gender		
Male	19	45
Female	23	55
Age		
60 -70 years old	14	33
71-80 years old	28	67
>80 years old	0	0
Occupation		
Pensionary	5	12
Private employees	6	14
Merchant	6	14
Unemployment	25	60
Religion		
Islam	42	100
Ethnic		
Javanese	42	100

Table 1 shows that of the 42 respondents, more than half were female, with 23 respondents (55%). More than half of the respondents were 71-80 years old (67%, n=28). The respondents' occupation was mainly

unemployment (60%, n=25). Based on table 5.1, all respondents were Islam (100%), and all were Javanese (100%).

The education level of the elderly

Table 2 Distribution of Respondents' Characteristics based on the education level of the elderly in Prambon Tergayang Village, Soko Tuban District.

Education Level	Frequency	Percentage (%)
High	6	14
Medium	11	26
Low	25	60
Total	42	100

Table 2 shows, the most of respondents had low educational level (60%, n=25).

The economic status of the elderly

Table 3 Distribution of Respondents' Characteristics based on the economic status of the elderly in Prambon Tergayang Village, Soko Tuban District.

Economic Status	Frequency	Percentage (%)
Low	25	59,5
High	17	40,5
Total	42	100

Table 3 shows that from 42 respondents, more than some respondents have a low economic status (59.5%, n=59.5).

The use of scraping on elderly

Table 4 Distribution of Characteristics of Respondents based on the use of scrapings by the elderly in Prambon Tergayang Village, Soko Tuban District.

No	Use of scraps	Frequency	Percentage
1	High frequencies	26	62
2	Medium frequencies	7	16
3	Low frequencies	9	22
	Total	42	100

Based on the table 4, it shows that from 42 respondents, more than half respondents used scrapings (62%, n=26).

The Relationship between Education Level and The Use of Scraping

Table 5 Cross Distribution of Relationship between Education Level and The Use of Scraping in the Elderly in Prambon Tergayang Village, Soko Tuban District.

Education Level	Use of scraps						Total	
	Low		Medium		High		n	%
	n	%	n	%	n	%		
High	2	5	2	5	3	7	6	14
Medium	1	2,3	2	5	9	22	11	26
Low	6	14,7	3	6	14	33	25	60
Total	9	22	7	16	26	62	42	100

Spearman *Rho Test* $\rho = 0,007$ $r = 0,472$

Based on table 5, six respondents (14.7%) indicated a low level of education and low-frequency use of scrapings. Three respondents (6%) have a low level of education while using scrapings shows a moderate

frequency. Fourteen respondents (33%) had a low level of education, while the use of scrapings showed a high frequency.

There was a respondent (2.3%) who had a medium and low level of education in using scrapings, two respondents (5%) having a moderate level of education and a moderate frequency of using scrapings, and most respondents (22%, n=9) have an education level. and followed by a high frequency of scrapings.

Then, two respondents (5%) have a high level of education, but the frequency of scraping is low. Two other respondents (5%) have a high level of education and a moderate frequency of scraping, and six respondents (14%) have a high level of education and frequency of scraping. Analysis using Spearman Rho statistical test $p=0.007$ ($p=$ value <0.05). These results indicate that Hypothesis 1 is accepted. There is a relationship between the level of education and the use of scrapings on the elderly. The value of $r = 0.472$. It can be interpreted as a strong and positive relationship between the level of education and scrapings on the elderly.

The Relationship between Economic Level and Utilization of Scraps

Table 6 Cross Distribution of Relationship between Economic Status and The Use of Scraping in the Elderly in Prambon Tergayang Village, Soko Tuban District

Economic Status	Use of scrapings						Total	
	Low		Medium		High		n	%
	n	%	n	%	n	%		
Low	4	9,9	6	14	15	36	25	59,5
High	5	12,1	1	2	11	26	17	40,5
Total	9	22	7	16	26	62	42	100

Spearman *Rho Test* $\rho = 0,071$ $r = -0,09$

Based on table 6, four respondents (9.9%) had low economic status and scraping frequency. Six other respondents (14%) had low economic status, but the frequency of scrapings is in the moderate category. A total of 15 respondents (36%) had low economic status, but the frequency of scrapings is in the high category.

Then, five respondents (12.1%) had high economic status but low use of scrapings. One respondent (2%) had a high economic status but was low in the use of scrapings, and the remaining respondents (26%, n=11) had high economic status and were followed by a high frequency of scrapings.

Analysis using Spearman Rho statistical test obtained $p = 0.071$ ($p=$ value <0.05). These results show that H1 is rejected, meaning there is no relationship between economic factors and the use of scrapings on the elderly. The value of $r = -0.09$ can be interpreted as having no significant relationship between economic factors and the use of scrapings on the elderly.

DISCUSSION

The Relationship of Education Level with Scraping Utilization in the Elderly

The results showed a relationship between educational factors and the use of scrapings on the elderly. This is in line with Sari and Prastianty research (2017), which states that the educational factor is significant for the Jambi Malay tribe with education or knowledge of various experiences in overcoming a health problem.

Leininger and R McFarland (2002), suggests that health behavior is shaped by various factors that work together. The higher an individual's education, the individual's belief can be supported by scientific evidence that is rational and can adapt to a culture that is in accordance with his health condition. According to Nugroho (2000), the higher the individual's education is expected to be able to carry out something important for himself and their community.

The category of 'moderate education level' in this research was the respondents who graduated from junior high school or equivalent also respondents who graduated from high school or equivalent. The results show that 31 respondents graduated from junior high school or the equivalent, and 16 graduated from high school or the equivalent. Respondent code no.1 has a high education level: he graduated from college but still uses scrapings to help relieve unwell feelings. According to Mubarak and Chayatin, (2009), the level of education can affect awareness of the importance of health for oneself and the environment, which can encourage the need for health services. The elderly with higher formal education will have higher knowledge than the elderly with lower education levels. Supardi, Jamal and Loupatty (2012), stated that the number of educated people who did not finish high school/equivalent was 1.17 times higher than the population who graduated from high school/equivalent.

Education is one of the supporting factors in the use of scrapings. Education is not only knowledge and learning outcomes but also experiences gained from the surrounding culture and habits. People choose the treatment method of using scrapings because it is obtained from previous people's experiences and the community's habits, so using scrapings becomes a suggestion for the elderly to get rid of feeling unwell. Factors in the theory of transcultural nursing that are more strongly related to using scrapings in the elderly are technological factors, beliefs and philosophy factors, social factors and family attachments, cultural values and lifestyle factors, and prevailing policy factors.

The Relationship between Economic Level and Scraping Utilization in the Elderly

This study's results indicate no relationship between economic factors and the use of scrapings on the elderly. This study's results align with Didik (2004) which explains that a person's education level does not significantly influence treatment behavior, whether treatment uses traditional or modern, or conventional methods. Research conducted by Supardi, Jamal and Loupatty (2012), also explains that the economic level of the Indonesian population does not have a significant relationship with the use of traditional medicine or traditional medicine.

The study's results showed no relationship between the education factor and the use of scraping on the elderly. Family income can determine the health status of the family. Good family income can affect maintaining cleanliness and subsequent handling based on family income. Meanwhile, low-income families can only meet their needs in health facilities according to their abilities (Kemenkes, 2017). However, this does not apply to families with good incomes but have many family members whose living expenses are covered. According to Leininger and R McFarland (2002), people will take advantage of the material resources they have to pay for their illness to recover quickly.

The results showed that 25 respondents had low economic status and 17 had high economic status, even though they both had high scores on using scrapings. It can be said that economic factors are not related to the use of scrapings on the elderly. No matter the high or low economic status of the elderly, they still use scrapings to relieve the mild symptoms of their disease. Economic factors do not guarantee that the elderly choose a medication treatment. It is evident that even respondents with high economic status also use scrapings as a treatment method.

CONCLUSION

It can be concluded that the education factor is related to the use of scrapings by the elderly (p-value = 0.007), while the economic factor is not related (p-value = 0.071). Further research needs to be done to examine the effects of scrapings on the health of the elderly.

REFERENCES

- Didik, T. (2004) 'Budaya Kerokan Sebagai Upaya Pengobatan Tradisional', *Buletin UNS*, 9, p. 14.
- Efendi, F. and Makhfudli, M. (2009) 'Keperawatan Kesehatan Komunitas: teori dan praktik dalam keperawatan'. Salemba Medika.
- Indriani, N.R. (2019) 'ANALISIS FAKTOR PEMANFAATAN KEROKAN PADA LANSIA BERBASIS KEPERAWATAN TRANSKULTURAL DI POSYANDU LANSIA SUKMAJAYA KELURAHAN KERTAJAYA SURABAYA'. Universitas Airlangga.
- Kemenkes, R.I. (2017) 'Analisis lansia di Indonesia', *Pusat data dan informasi Kementerian Kesehatan RI*, pp. 1–2.
- Kementerian Kesehatan Republik Indonesia (2018) 'Laporan Nasional Riset Kesehatan Dasar', *Kementerian Kesehatan RI*, pp. 1–582.
- Leininger, M. and R McFarland, M. (2002) *Transcultural nursing: concepts, theories, research, and practice*. McGraw-Hill.
- Mubarak, W.I. and Chayatin, N. (2009) 'Ilmu kesehatan masyarakat: teori dan aplikasi'.
- Nugroho, W. (2000) 'Keperawatan gerontik edisi 2', *Jakarta: EGC* [Preprint].
- Permasatasari, L. I., Lukman, M., & S. (2014) 'Family Support and Self Efficacy Relationship with Hypertensive Elderly Self-Care', *Indonesian Journal of Public Health*, 10(2), pp. 993–1003.

- RI, D. (2003) *Keputusan Menteri Kesehatan Republik Indonesia Nomor 1027. MENKES/SK/VII/2003 Tentang Penyelenggaraan Pengobatan Tradisional*. Jakarta.
- Sari, M.T. and Prastianty, S. (2017) 'Sick health behaviors of the jambi malay tribe based on transcultural nursing approach (sunrise model) at muara kumpeh village kumpeh ulu district muaro jambi regency', *Jurnal Ilmiah Universitas Batanghari Jambi*, 17(3), pp. 216–226.
- Supadmi, W. (2013) 'Gambaran Pasien Geriatri Melakukan Swamedikasi Di Kabupaten Sleman Discription Of Geriatric Patients In Doing The Self Medication In Sleman'. Pharmacia.
- Supardi, S., Jamal, S. and Loupatty, A.M. (2012) 'Beberapa faktor yang berhubungan dengan penggunaan obat tradisional dalam pengobatan sendiri di Indonesia'.
- Suryani, M. and Sianturi, M. (2013) 'Pengalaman Kerokan Sebagai Terapi Komplementer', *Karya Ilmiah* [Preprint].
- Triratnawati, A. (2010) 'Pengobatan tradisional, upaya meminimalkan biaya kesehatan masyarakat desa di Jawa', *Jurnal Manajemen Pelayanan Kesehatan*, 13(2), pp. 69–73.