

Hubungan Pendidikan Dan Pendapatan Orang Tua Dengan Personal Hygiene Dalam Pengasuhan Balita

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Abstrak

Praktik personal hygiene yang buruk dapat berpengaruh pada kejadian penyakit infeksi yang pada akhirnya dapat meningkatkan risiko stunting pada anak. Beberapa faktor yang memengaruhi praktik personal hygiene dalam pengasuhan balita adalah tingkat pendidikan dan pendapatan orang tua. Penelitian ini bertujuan untuk menganalisis hubungan tingkat pendidikan dan pendapatan orang tua dengan praktik personal hygiene dalam pengasuhan balita. Desain penelitian adalah kuantitatif korelasional dengan sumber data sekunder. Populasi merupakan orang tua yang memiliki balita di Desa Sukamulya, Kabupaten Bandung. Orang tua yang anaknya meninggal di kisaran usia balita atau anaknya berusia 5 tahun saat pengambilan data dikeluarkan dari sampel. Sampel diambil menggunakan teknik accidental sampling dengan jumlah 85 responden. Instrumen berupa kuesioner yang terdiri dari data demografi dan 7 pertanyaan terkait praktik personal hygiene dalam pengasuhan balita. Uji statistik yang akan digunakan adalah uji Spearman. Hasil uji Spearman menunjukkan tidak terdapat hubungan antara tingkat pendidikan ($p\text{-value}=0,16$) dan pendapatan ($p\text{-value}=0,887$) orang tua dengan praktik personal hygiene dalam pengasuhan balita di Desa Sukamulya, Kabupaten Bandung. Saran penelitian berikutnya dapat diteliti faktor-faktor lain yang memengaruhi praktik personal hygiene dalam pengasuhan balita.

Kata kunci: Pendapatan, pendidikan, personal hygiene, pola asuh

Relationship Between Parents' Education And Income Level With Personal Hygiene Practices In Under-Five Children Care

Abstract

Poor personal hygiene practices can affect the incidence of infectious diseases which in turn can increase the risk of stunting. Several factors influence the practice of personal hygiene in the care of under-five children, namely the level of education and income of parents. The research was to analyze the relationship between parents' education and income level with personal hygiene practices in under-five children's care. The research design is a quantitative correlation with secondary data sources. The population is parents who have under-five children in Sukamulya Village, Bandung. Samples were taken using an accidental sampling technique with a total of 85 respondents, excluding parents whose children died in the under-five age range or whose children were 5 years old at the time of data collection. The instrument is a questionnaire consisting of demographic data and 7 questions related to personal hygiene practices in caring for under-five children. The data were analyzed using the Spearman test. The results showed that there was no relationship between the educational ($p\text{-value}=0.16$) and income ($p\text{-value}=0.887$) level of parents with personal hygiene practices in caring for under-five children in Sukamulya Village, Bandung. The next research suggestion is to examine other factors that influence personal hygiene practices in caring for under-five children.

Keywords: Economic status, education, parenting, personal hygiene

Introduction

Stunting or often called short is a condition of growth failure in children under-five years old due to chronic malnutrition and recurrent infections, especially in the period of the first 1,000 days of life, which is from the fetus to the child age 23 months. Children are classified as stunted if their length or height is below minus two standard deviations in length or height of children of their age (Permenkes RI, 2010). Stunting causes inhibition of children's physical growth and causes cognitive development barriers that will affect children's intelligence and productivity levels in the future. Children who are stunted, when they grow up will be susceptible to non-communicable diseases (Ministry of State Secretariat of the Republic of Indonesia, 2020). Based on data obtained from the Study of Indonesian Nutritional Status in 2021, the percentage of stunting nationwide is 24.4%, the percentage of stunting in West Java is 24.5%, and the percentage of stunting in Bandung Regency is 31.1% (Research and Development Agency of the Ministry of Health of the Republic of Indonesia, 2021). In Sukamulya Village, Bandung Regency, there were 97 children out of a total of 659 children in February 2022 who were recorded as having a proportion of height according to age below normal which can be categorized as stunting and 36 of them have low weight as well. This makes Sukamulya Village one of the loci of stunting in Bandung Regency so special attention is needed to support the acceleration of the decline in stunting cases in the village.

Based on the framework of the causes of nutritional problems "The Conceptual Framework of the Determinants of Child Undernutrition" from the United Nations International Children's Emergency Fund (UNICEF) and "The Underlying Drivers of Malnutrition" from the International Food Policy Research Institute (IFPRI) adapted to the situation in Indonesia, stunting prevention needs to be focused on handling the causes of nutritional problems directly or indirectly (Ministry of State Secretariat of the Republic of Indonesia, 2019). One of the causal factors that need to be considered is personal hygiene which is included in the indirect causes from

the social environment category.

Personal hygiene is defined by the World Health Organization (WHO) as practices and conditions that help prevent the spread of disease and maintain health. Related to stunting, poor personal hygiene practices can affect the incidence of enteropathy and the incidence of diarrhea due to digestive infections which in turn can increase the risk of stunting in children (Goudet, Bogin, Madise, & Griffiths, 2019). There are studies with results that there is a significant relationship between children's hygiene and stunting incidence ($p\text{-value} = 0.000$) and it is also found that personal hygiene is a protective factor against stunting (Aisah, Ngaisyah, & Rahmuniyati, 2019).

Research that explains the factors that influence the practice of personal hygiene in the care of under-five children does not exist yet, so researchers use the results of research related to health behaviors because personal hygiene is part of health behaviors. According to the Precede Model, 3 factors affect health behaviors, namely predisposing factors, enabling factors, and reinforcing factors. Predisposing factors include knowledge, attitudes, beliefs, values, and perceptions that facilitate or hinder the motivation to change. Enabling factors are various skills, resources, or inhibitors that can help or hinder the desire to change behavior. The reinforcing factor is the reward or feedback that a person receives from other elements that can encourage or discourage them from practicing a behavior on an ongoing basis (Green & Kreuter, 1991). In that model, the level of education is closely related to the predisposing factors of personal hygiene practices in the care of under-five children, while the level of income includes enabling factors related to the accessibility of resources that can influence the desire to practice personal hygiene in the care of under-five children.

From the results of previous research on the influence of maternal education levels on under-five children's hygiene, there are Chi-Square test results at a degree of 95% confidence ($\alpha=0.05$) that the $p\text{-value}=0.001 < \alpha=0.05$ meaning that there is an influence between maternal education and under-five children's hygiene (Riska, 2016). Parental education can be an indirect indicator of

the socioeconomic level of the household. Families with parents who have a low level of education and income do not usually consider the practice of personal hygiene as a priority for families due to difficult living conditions (Kouakou et al., 2021). There are studies related to the influence of family socioeconomic status on the practice of Water, Sanitation, and Hygiene (WASH) of under-five children and it is stated that WASH practices in under-five children are positively influenced by the socioeconomic status of families with a p-value <0.001 (Raihan et al., 2017).

Based on data obtained from the Sukamulya Village Office, it can be seen that the total population of Sukamulya Village aged 18-56 years who graduated from elementary school/junior high school/senior high school was 4,198 people, while those who graduated from college were only 217 people out of a total 4,415 people as recorded at January 13, 2022. In addition, based on secondary data from the results of research in the Riset Kompetensi Dosen Unpad (RKDU) activity entitled "Environmental Modification through Sanitation, Clean Water, Hygiene, and Nutrition for Stunting Prevention", it can be seen that the residents of Sukamulya Village who have income below the regional minimum salary (RMS) of Bandung Regency in 2022 when collecting data or amounting to Rp3,241,929 (Labor and Transmigration Office of West Java Province, 2021) are as many as 280 people or 60.2% of the total 465 respondents, while those who have incomes above Rp5,000,000 are only 14 people or 3% of the total respondents.

The level of education and income is crucial because it has an impact on predisposing factors and enabling factors if it is associated with health behavior. In addition, both factors are easier to identify compared to other factors. As previously explained, Sukamulya Village is one of the loci of stunting in Bandung Regency, and in theory, the level of education and income of the residents of Sukamulya Village who on average have the last education of elementary/junior high school/senior high school and income below the district RMS allows it to be an obstacle factor in the practice of personal hygiene. In the care of

under-five children in the village, it is feared that it can indirectly hinder the process of accelerating the handling of stunting in the village. Therefore, researchers want to know the relationship between parents' education and income levels with personal hygiene practices in under-five children's care in Sukamulya Village, Bandung Regency.

Research Method

The design of this study uses correlational quantitative methods with a secondary data approach. Data were taken in August-September 2022. The population in this study was parents who had under-five children and lived in Sukamulya Village, Rancaekek District, Bandung Regency. The sample inclusion criteria are parents who have under-five children in Sukamulya Village, Bandung Regency, and are willing to participate, while the exclusion criteria are parents whose children died in the age range of under-five children or their children aged 5 years at the time of data collection. The sample was taken by the primary researcher using an accidental sampling technique and obtained a total sample of 85 respondents.

The secondary data used in this study has gone through ethical clearance from the Research Ethics Commission of Padjadjaran University with ethics number 739/UN6. KEP/EC/2022, and pays attention to the ethical principles of research informed consent, confidentiality, and beneficence.

The instrument used in this study was a questionnaire consisting of demographic data and 7 questions related to personal hygiene practices in the care of under-five children. The instrument refers to a standard questionnaire related to maternal knowledge about stunting which was used in the primary research of RKDU activity with the title "Environmental Modification through Sanitation, Clean Water, Hygiene, and Nutrition for Stunting Prevention". The instrument has been tested for validity with test results using a 5% degree of significance and declared valid. The instrument has also been tested for reliability with Cronbach's Alpha test with a test result of 0.859 and declared reliable. There is a possibility of bias in the data collected because the number

of questions asked to respondents in the primary study is quite large and the number of samples of parents who have under-five children is uneven in each community unit. The secondary data collected were then analyzed univariates and bivariates using the Spearman test with a 5% degree of

significance which aimed to analyze the relationship between parents' education and income levels with personal hygiene practices in under-five children care in Sukamulya Village, Rancaekek District, Bandung Regency.

Result

Table 1 Frequency distribution of respondents' characteristics (n=85)

Characteristic	Frequency (n)	Percentage (%)
Education level		
Low (No school, elementary school, and junior high school)	48	56.5
Intermediate (Senior high school)	33	38.8
Higher (College)	4	4.7
Income level		
Under the district RMS	46	54.1
RMS equivalent–Rp5,000,000	34	40
Above Rp5,000,000	5	5.9
Total data = 85		
Missing data = 0		

Based on table 1, it is known that the total number of respondents is 85 people. The majority of respondents' education levels were low with 48 people (56.5%), while respondents with secondary education levels were 33 people (38.8%), and respondents with higher education levels were 4 people (4.7%). In addition, the majority of respondents' income levels are below the RMS of Bandung Regency in 2022 with a total of 46 people (54.1%), while respondents with an income level equivalent to RMS–Rp5,000,000 totaled 34 people (40%), and respondents with income levels above Rp5,000,000 totaled 5 people (5.9%).

Table 2 Frequency distribution of personal hygiene practices in the care of under-five children (n=85)

Questions	Frequency (n)	Percentage (%)
Does the mother bathe the child more than 2 times a day?		
Yes	66	77.6
No	19	22.4
Does your child wash their hands before eating?		
Yes	76	89.4
No	9	10.6
Does your child after eating always wash their hands?		
Yes	80	94.1
No	5	5.9
Does your child after defecation, wash their hands with soap?		

Yes	82	96.5
No	3	3.5
Does your child when playing outside the house wear footwear?		
Yes	74	87.1
No	11	12.9
Does the mother clean the child's nails regularly? (if long)		
Yes	82	96.5
No	3	3.5
Does the mother help brush the child's teeth more than 2 times a day?		
Yes	63	74.1
No	22	25.9

Based on table 2 known of 7 questions related to personal hygiene practices in under-five children's care, the majority of respondents answered "Yes" to each question. The most implemented personal hygiene practices in under-five children care by respondents were children washing their hands after defecation (96.5%), cleaning children's nails (if long) (96.5%), and children washing their hands after eating (94.1%). On the other hand, the most infrequently personal hygiene practices in under-five children care were brushing children's teeth 2 times a day (74.1%), bathing children 2 times a day (77.6%), and children wearing footwear when playing outside the home (87.1%).

Table 3 Frequency distribution of personal hygiene practice categories in under-five children care (n=85)

Personal hygiene practices in under-five children care	Frequency (n)	Percentage (%)
Not good enough	17	20
Good	68	80

Based on table 3, the results of categorizing personal hygiene practices in under-five children's care showed that the majority of respondents had a good practice category with 68 people (80%), while respondents who had a bad practice category were 17 people (20%).

Table 4 Analysis of the relationship between education level and personal hygiene practices in the care of under-five children in Sukamulya Village, Bandung Regency (n=85)

Education level	Personal hygiene practice				Spearman's rho	p-value
	Good		Not good enough			
	n	%	n	%		
Low	36	42.4	12	14.1	0.154	0.16
Intermediate	28	32.9	5	5.9		
Higher	4	4.7	0	0		

Based on Table 4, Spearman test results showed a value of $p=0.16$ with $\alpha=0.05$ so that H_0 was accepted, namely, there was no relationship between parental education level and personal hygiene practices in under-five children care with Spearman's $\rho=0.154$ value indicating that between variables there was no strong relationship.

Table 5 Analysis of the relationship between income level and personal hygiene practices in the care of under-five children in Sukamulya Village, Bandung Regency (n=85)

Income level	Personal hygiene practice				Spearman's rho	p-value
	Good		Not good enough			
	n	%	n	%		
Under the district RMS	37	43.5	9	10.6	0.016	0.887
RMS equivalent–Rp5,000,000	26	30.6	8	9.4		
Above Rp5,000,000	5	5.9	0	0		

Based on Table 5, the Spearman test results showed a value of $p=0.887$ with $\alpha=0.05$ so that H_0 was accepted, namely, there was no relationship between parents' income level and personal hygiene practices in under-five children care with Spearman's value $\rho=0.016$ which showed that between variables there was no strong relationship.

Discussion

The relationship of education level with personal hygiene practices in under-five children care

The results of the statistical test with the Spearman test showed a p-value of 0.16. Based on these results, it is known that there is no relationship between the level of education of parents and the practice of personal hygiene in the care of under-five children in Sukamulya Village, Rancaekek District, Bandung Regency.

This is supported by research conducted by Wanimbo and Wartiningsih (2020), obtained $p\text{-value}=0.203$ using the Chi-Square test which means that there is no relationship between the incidence of stunting in children aged 7-24 months and the level of maternal education. Researchers say that maternal education does not guarantee more knowledge related to nutrition and health. From the results of direct observation, mothers who are poorly educated are more likely not to work so they have time in the morning to come to Pos Pelayanan Terpadu (Posyandu) every day to get additional food and get nutrition and health counseling. In line with the research by Saputri (2022), maternal education is not related to the incidence of stunting in under-five children because mothers of under-five children who are poorly educated but diligently attend Posyandu and also follow health and nutrition counseling for under-five children have sufficient knowledge in providing care and nutrition to under-five children which will have an impact on

decreasing the risk of stunting in under-five children. In addition, the level of education of the mother does not completely reduce the number of the family member who has diarrhea. Better maternal knowledge but not supported by efforts to improve the personal hygiene of mothers and family members can result poor environmental sanitation conditions which can increase the incidence of diarrhea which is at risk of causing stunting conditions in under-five children (Putri, 2019).

On the other hand, this study contradicts the research conducted by Riska (2016) about the influence of maternal education levels on under-five children's hygiene, there are Chi-Square test results at a 95% degree of confidence ($\alpha=0.05$) that the p-value is 0.001 meaning that there is an influence between maternal education and under-five children's hygiene. Parents who have higher education are more oriented towards preventive measures, tend to know more about health problems, and have the possibility of a better health status (Timmreck, 2004). In addition, the level of education is related to the knowledge that the mother has regarding parenting so that the mother can determine the parenting style given to her child (Yuliana & Hakim, 2019). The higher the education of parents, it is hoped that parents will have better knowledge of parenting, one of which is the parenting pattern related to the personal hygiene of children (Engle et al., 2000, in Burhani et al., 2016). Low education makes it difficult for people to accept the importance of personal hygiene practices which results in indifference to personal hygiene practices

as an effort to prevent infectious diseases. Rasjid, Satra Yunola, and Chairuna (2021) also explained that due to the lack of education among mothers, some things become poorly understood by mothers, such as how to clean eating utensils and baby milk bottles are not appropriate so that their children have diarrhea. Then the child is not taught before handling food to wash their hands first, as well as fruits to wash first before peeling and consuming.

The relationship of income level with personal hygiene practices in under-five children care

The results of the statistical test with the Spearman test showed a p-value of 0.887. Based on these results, it is known that there is no relationship between parents' income levels and personal hygiene practices in the care of under-five children in Sukamulya Village, Rancaekek District, Bandung Regency.

The results of this study contradict the results of previous studies. There are studies related to the influence of family socioeconomic status on the practice of WASH of under-five children and it is stated that WASH practices in under-five children are positively influenced by the socioeconomic status of families with a p-value <0.001 (Raihan et al., 2017). The state of the person's economy affects the type and level of hygiene practices used. Personal hygiene requires tools and ingredients such as soap, toothpaste, toothbrush, shampoo, deodorant, and others. Those various products require money to get them (Department of Health Australian Government, 2010 in Riska, 2016). In addition, families with parents who have a low level of education and income do not usually consider the practice of personal hygiene as a priority for families with often difficult living conditions (Kouakou et al., 2021). This is in line with research by Ginting (2019) that also concludes that there is a meaningful relationship between income levels and the incidence of diarrhea in under-five children. In the study area, it is very rare to find sinks intended for family members to wash their hands with soap, most respondents wash their hands by dipping water in a

reservoir for hand washing, this condition allows transmission among family members because they use the same washing place and water. Hand washing is also mostly only done if physically the hands look dirty, for example, exposed to the ground, then the respondent washes their hands. Similar occurrences also occur in research by Putri (2019). Limited family income makes some respondents still use public latrines because of the lack of land owned and the lack of funds to own family latrines. Using a public latrine can affect the personal hygiene of respondents and family members because the general latrine used is not necessarily kept clean so the incidence of under-five children diarrhea in respondents with income less than RMS is still high. In addition, in urban slums of South India, high morbidity rates were found in children with low-income families in an amount of 66.1% and low socioeconomic status in an amount of 98.1%. The most common diseases found are skin infections, fever, cough, pneumonia, and diarrhea. The morbidity rate is significantly related to personal hygiene where as many as 83% of under-five children do not have good personal hygiene. Among under-five children who have poor personal hygiene, the majority suffer from skin infections and coughs. Among under-five children whose personal hygiene is inadequate, the majority suffer from diarrhea, pneumonia, fever, angular stomatitis, and ear infections. There were fewer cases of eye infections and dental caries in children with good personal hygiene (Roja, Narayanan, Sekaran, & Ajith Kumar, 2020).

Referring to the Precede Model theory proposed by Lawrence W. Green, the researcher assumed that although most of the residents of Sukamulya Village, Bandung Regency have a lower middle-income level, there is another possible factor that contributes to supporting personal hygiene practices in the care of under-five children in Sukamulya Village, Bandung Regency, namely the commitment of the community and local government regarding good health. Based on the observations of researchers, the village, especially Pemberdayaan Kesejahteraan Keluarga (PKK) and Posyandu are quite active in conducting education and programs related to child growth and development and

also clean and healthy living behaviors.

Nurses can take part in improving the quality of health in the community. The role of nurses, especially community nurses, in fostering families, one of which is related to personal hygiene in the care of under-five children, including:

a. Informer

Nurses as informers should inform families about matters related to health, especially about personal hygiene in the care of under-five children.

b. Extension workers

To make families know more about personal hygiene in the care of under-five children and are interested in carrying it out, the nurse is in charge of providing counseling to both individuals in the family and groups in the community.

c. Educator

The main goal of health development is to help individuals, families, and communities to behave healthily so that they can fulfill their needs independently. To achieve this goal, nurses are tasked with educating families to behave healthily and always provide positive examples of health, including the practice of personal hygiene in the care of under-five children.

d. Motivator

If the family already knows and tries to carry out positive behaviors in health, it needs to be encouraged to be consistent and more developed. Regarding that, the nurse can act as a motivator (Djuhaeni, 2015). Nurses should encourage and empower communities to be able to practice personal hygiene sustainably with the resources owned by the community.

The limitation of this study is that it does not examine food hygiene which is part of personal hygiene practices and the sample is less large when compared to the population.

Conclusion

The results of this study are:

1. Personal hygiene practices in under-five children care carried out by respondents were in a good category with a percentage of 80%. The most implemented personal hygiene practices in under-five children care by respondents were children washing their hands after defecation (96.5%), cleaning children's nails (if long) (96.5%), and children washing their hands after eating (94.1%). On the other hand, the most infrequently personal hygiene practices in under-five children care were brushing children's teeth 2 times a day (74.1%), bathing children 2 times a day (77.6%), and children wearing footwear when playing outside the home (87.1%).
2. There is no significant relationship between parents' education level and personal hygiene practices in under-five children's care in Sukamulya Village, Rancaekek District, Bandung Regency (p-value=0.16).
3. There is no significant relationship between parents' income levels and personal hygiene practices in under-five children's care in Sukamulya Village, Rancaekek District, Bandung Regency (p-value=0.887).

The implication in the world of nursing, especially for community nurses, is that this research can be used to determine intervention goals and strategies, as well as educational content related to personal hygiene practices in under-five children at the root of stunting so that the programs launched can be carried out more effectively and efficiently. Subsequent research suggestions can be examined for other factors that influence personal hygiene practices in under-five children care.

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