Meeting basic physical-biomedical needs of children under 5 years; does the family hope program work?

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ABSTRACT

Background: fulfillment of the basic physical biomedical needs of children under five affects their growth and development. Most poor families pay little attention to the basic needs of their children due to lack of knowledge and the economy. To overcome this, the Ministry of Social Affairs of the Republic of Indonesia has issued social security to reduce the number of poverty and social welfare cases called the Family Hope Program (PKH). Within the health sector, KPM (Beneficiary Families) are required to ensure the provision of fundamental healthcare services for children under the age of five. These services include monthly regular vaccines, biannual administration of Vitamin A, and monthly monitoring of the children’s weight.

Objectives: this study aims to analyze the impact of conditional cash transfer programs on the fulfillment of basic physical-biomedical needs.

Methods: we conducted a quantitative study using a cross sectional design. Our research sample was 83 of 289 children under five years in Patempuran-Kalisat-Jember taken using simple random sampling technique.

Results: the results showed that there were no differences in the completeness of immunization (Sig = 0.501), exclusive breastfeeding (Sig = 0.378), routine weighing (Sig = 0.445) and utilization of health services (Sig = 0.845) between conditional cash transfer program recipients and non recipients.

Conclusions: This program is considered effective because the majority of children under five have received complete basic immunization and routinely have their weight weighed at the posyandu, but children under the age of five are not given exclusive breast milk. The social service and primary health care need to increase collaboration to provide education about the importance of exclusive breastfeeding.

KEYWORD: biomedical physical needs; conditional cash transfer program; toddler
INTRODUCTION

The Family Hope Program (PKH) was established by the Indonesian government in 2007 to break the cycle of family poverty. The implementation of PKH has reached all of Indonesia, even isolated places, and is known as PKH Akses. Nonetheless, this help represents a milestone for the government with a different method than other sorts of services, such as the conditional assistance model. As a conditional social assistance program, PKH provides non-cash and social aid. Beneficiary Families (KPM) can utilize non-cash money to alleviate family costs such as home burdens and the duty of access to other social services such as education, health, and social welfare. The service access in question is family access, particularly for pregnant women and toddlers, to take use of numerous health service facilities and educational service facilities for school-age children located nearby, as well as access to services for older parents (seniors) (1).

Parents have a responsibility to fulfill the fundamental requirements of children in order to facilitate their optimum development. However, certain parents may be incapable of meeting these commitments (2). The nutritional condition of a child is influenced by their biological physical demands, as these needs are interconnected with their physical surroundings (3). Children under the age of five commonly experience several nutritional issues, including malnutrition and stunting. Malnutrition affects children between the ages of 0-59 months, whereas stunting is more prevalent among children aged 0-23 months (4). In Indonesia, the prevalence of malnutrition among children under the age of five ranges from 50% to 59%. UNICEF attributes this issue to impoverished families or those living in conflict-ridden areas, resulting in malnutrition among their children (5). To overcome this, the Ministry of Social Affairs of the Republic of Indonesia has issued social security to reduce the number of poverty and social welfare cases called the Family Hope Program (PKH) (6).

The Ministry of Social Affairs in Indonesia aims to reach 10 million KPM PKH beneficiaries in 2019. One of the specific regions in East Java that is being targeted for PKH is Jember Regency. The initiative has been implemented in 31 sub-districts. Within the health sector, KPM (Beneficiary Families) are required to ensure the provision of fundamental healthcare services for children under the age of five. These services include monthly regular vaccines, biannual administration of Vitamin A, and monthly monitoring of the children's weight (6). Beneficiary Families of the Family Hope
Program must be dedicated to fulfilling their commitments as PKH participants, both in the health and education sectors, as needed. The duty in education is to register pupils and guarantee that they attend their academic units depending on their educational level. Costs, busy employment, insufficient education, and other factors are the most common reasons why low-income families do not complete their education. Similarly, due to their poor income, they cannot afford health examinations for family members with health issues. Increasing access to health care, education, and social assistance in order to attain quality of life for low-income families with short-term goals can help to alleviate their financial burden. And the Family Hope Program’s purpose is to end the cycle of poverty (7).

The fundamental physiological requirements in the biomedical field encompass essential medical treatment, nourishment, housing, personal cleanliness, environmental cleanliness, clothing, physical necessities, and leisure activities (3). In order for children’s needs to be met, the role of parents, family and the environment plays an important role in fulfilling good nutritional status so that children’s health can be achieved. This is in line with research by which stated that family function is related to children’s nutritional status (8). The mother’s stimulation has a significant impact on the child’s growth (9). The health of children is impacted by two main factors: behavioral factors and non-behavioral factors.

According to Lawrence Green’s theory, a person’s health behavior is influenced by three specific factors. These factors include predisposing factors such as age, occupation, education, knowledge, and attitudes. Additionally, enabling factors such as the environment and access to healthcare facilities play a role. Lastly, strengthening factors, such as support from family and community leaders, also contribute to a person’s health behavior. According to Anderson’s Health System Model theory, the variables influencing the utilization of health care may be categorized as perceived and assessed (10).

Approximately 40% of children under the age of five in Africa experience stunted growth due to living in rural settings, which hinders their access to adequate nutrition, unlike their urban counterparts. In Indonesia, the prevalence of malnutrition in children under the age of five ranges from 50% to 59%. UNICEF attributes this issue to impoverished families or those living in conflict-ridden areas, resulting in nutritional deficiencies among children (5). Kalisat District has the most families getting benefits from the Family Hope Program in Jember Regency (1622...
KPM) and the most children under five years who participate in PKH. According to the 2019 KPM recapitulation findings, Patempuran Village has the most PKH participants under the age of five, with 206 KPM (Jember Regency Family Hope Programme Implementation Unit Secretariat. This indicates that there is vulnerability to meeting the biomedical physical needs of toddlers in Patempuran village. These needs include good nutritional status, complete immunization status, adequate health care, exclusive breastfeeding and monitoring the growth and development of toddlers through regular attendance at posyandu.

Many studies have been conducted regarding the impact of implementing the PKH program, and most of them focus on economic and educational issues. There are still few studies that examine the impact of PKH on children's health using more comprehensive variables. Our study examines the impact of PKH implementation on meeting the basic physical and biological needs of toddlers, such as immunization status, exclusive breastfeeding, monitoring growth and development and utilization of health services when toddlers are sick. Thus, the results of this research can contribute to enhancing the performance of the PKH program so that it has a substantial impact on improving the health condition of children in Petempuran Village, Kalisat District, Jember Regency.

**MATERIALS AND METHODS**

This study used a cross-sectional research approach. This design was employed with the premise that data collecting on study variables is conducted simultaneously. The study focused on the population of children aged 12-59 months in Patempuran Village, Kalisat Jember District. Meanwhile, the sample for this study was selected using a random sampling approach. It included several children under the age of five from Patempuran Village, located in the Kalisat Jember District. To ensure the research is conducted with optimal effectiveness and efficiency, and to prevent any data bias, the researchers carefully selected and screened the sample. The objective was to maintain a sample that accurately represents the community under investigation. Therefore, certain criteria were established to determine which individuals would be included or excluded from the sample. Inclusion criteria were: 1) parents with children aged 12-59 months who are registered for postnatal health care; 2) mother residing in Patempuran Village, Kalisat Jember District; 3) the mother with a lawful spouse in accordance with both legal and religious regulations; 4) the
wife cohabitates with her spouse; 5) the husband without employed at a location outside the city; 6) interested in participating as a research participant. The exclusion criteria encompassed children under the age of five who lack both parents or have deceased parents, as well as those who have relocated from their original residence.

The research utilized secondary data obtained from the Jember Regency Social Service. This data was used to ascertain the count of children under the age of five who received PKH, the number of children under the age of five received from the Kalisat Community Health Center, as well as information on immunization status and weight weighing routines for children under the age of five. The latter information was sourced from the KIA or KMS book. The characteristics related to vaccination and weight measurement in this study were acquired by reference to the KIA book. Immunization is considered comprehensive when a child under the age of five has received all essential vaccines, whereas it is considered incomplete if a child under the age of five has not received any of the essential immunizations.

The exclusive breastfeeding variable refers to the provision of breast milk to infants aged 0-6 months, without the inclusion of any solid food or other beverages. The tool for identifying exclusive breastfeeding is an interview guide with six questions. Respondents were considered to be in the exclusive breastfeeding category if they answered “Yes” to the question “Did the mother breastfeed or give breast milk to your baby?”, and the question “Did the mother give colostrum to your baby?” Then the respondent answered “No” to the question “Has your child ever been given prelacteal?” and the question “Has the mother ever given formula milk before the baby was 6 months old?”. Then comes the question, "How old was your baby when you were given food or drink other than breastmilk?" and "How old is your baby no longer breastfeeding?," respondents answered "more than 6 months. The variable for weighing toddlers is classified into two categories, namely "routine" if the respondent visits the posyandu every month to weigh the toddler (as evidenced by the completeness of recording the toddler’s weight in the Maternal and Child Health (KIA) book) and if the recording in the MCH book is incomplete, then it is categorized as "not routine". Health service utilization variables were obtained through interviews. This variable was divided into private health services if the respondent answered "practicing midwife", or "practicing

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doctor", or "practicing nurse", or "clinic" to the question "Where do you seek treatment when your child is sick?". If the respondent answers "puskesmas" or "regional hospital" to the same question, then it is categorized as government health services. The instrument for measuring these three variables was not tested for validity and reliability because it is an observed variable, not a latent variable.

After conducting research, researchers analyzed it using SPSS statistics. The analysis consists of univariate and bivariate analysis. Where the test used in biavariate analysis uses the chi-square test. The basics of decision making are: 1) If P value (sig) <α; then Ho is rejected. This means that there are differences between children under the age of five who are PKH recipients and non-PKH recipients in meeting their basic biomedical physical needs; 2) If P value (sig)> α; Ho is accepted, which means there is no difference between children under the age of five who are PKH recipients and non-PKH recipients in meeting their basic physical and biomedical need.

RESULTS AND DISCUSSION

RESULTS

The respondents sampled in this study were 83 mothers of toddlers. This number was obtained from sampling according to inclusion and exclusion criteria, where of the total number of respondents from mothers with toddlers in Patempuran Village, Kalisat Jember District, totaling 289 respondents, only 83 respondents were selected. Next, an analysis of the differences between children under the age of five receiving PKH and non-PKH recipients in meeting their basic physical and biomedical needs is carried out. The general distribution is as follows:

<table>
<thead>
<tr>
<th>Biomedical Physical Needs</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunization Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completed</td>
<td>73</td>
<td>88</td>
</tr>
<tr>
<td>Not completed</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>83</td>
<td>100</td>
</tr>
<tr>
<td>Exclusive breastfeeding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>36</td>
<td>43</td>
</tr>
<tr>
<td>No</td>
<td>47</td>
<td>57</td>
</tr>
<tr>
<td>Total</td>
<td>83</td>
<td>100</td>
</tr>
<tr>
<td>Weight Weighing Routine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>76</td>
<td>92</td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>83</td>
<td>100</td>
</tr>
</tbody>
</table>

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Based on the results of the documentation and interviews presented in Table 1, it shows that of the 83 respondents, more than 73 respondents (88%) received complete basic immunization, and 47 respondents (57%) did not provide exclusive breastfeeding, but many carried out routine weight-weighing. Body weight in children under the age of five was 76 respondents (92%) and more respondents used health services at polyclinics, namely 46 respondents (87%). Based on Table 2, it can be seen that the Chi-square test results obtained a p-value of 0.501 for the immunization status variable, 0.378 for the exclusive breastfeeding variable, 0.445 for the weight weighing routine variable and 0.845 for the health service utilization variable. The biomedical basic physical needs variable obtained a p-value (>α0.05) so that there was no difference in the fulfillment of basic biomedical physical needs between children under the age of five receiving PKH and non-PKH recipients.

<table>
<thead>
<tr>
<th>Biomedical Basic Physical Needs</th>
<th>PKH recipients</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>n(%)</td>
<td>n(%)</td>
</tr>
<tr>
<td>Immunization Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completed</td>
<td>32(39)</td>
<td>41(49)</td>
</tr>
<tr>
<td>Not completed</td>
<td>6(7)</td>
<td>4(5)</td>
</tr>
<tr>
<td>Exclusive breastfeeding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>14(17)</td>
<td>22(26)</td>
</tr>
<tr>
<td>No</td>
<td>24(29)</td>
<td>23(28)</td>
</tr>
<tr>
<td>Weight Weighing Routine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>36(43)</td>
<td>40(48)</td>
</tr>
<tr>
<td>No</td>
<td>2(2)</td>
<td>5(7)</td>
</tr>
<tr>
<td>Utilization of Health Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private health services</td>
<td>22(27)</td>
<td>24(29)</td>
</tr>
<tr>
<td>Government health services</td>
<td>16(19)</td>
<td>21(25)</td>
</tr>
</tbody>
</table>

**DISCUSSION**

Children under the age of five who are beneficiaries of the PKH program must get comprehensive primary vaccination, exclusively consume breast milk, regularly monitor their weight, and
avail healthcare services specifically designed for children in this age group. Recipients of PKH have close supervision by PKH helpers who verify their progress by inspecting the KIA book. PKH grantees who fail to fulfill their responsibilities will face consequences. Non-PKH recipient families, unlike PKH recipient families, do not get specialized monitoring and counseling from PKH facilitators. Receiving PKH aid enables recipient families to fulfill their educational and nutritional requirements (5). Immunization is a proactive measure aimed at enhancing an individual’s resistance to a disease, hence preventing or minimizing the severity of sickness in the event of future exposure to the disease (6). Families that get PKH support are more likely to engage in health checkups for children under the age of five and use social welfare programs to provide adequate nourishment for the aged and disabled (11). Immunization can prevent several illnesses including hepatitis, diphtheria, polio, tetanus, tuberculosis, pneumonia, HIB/HPV, and measles (4). Hence, a mother’s involvement is crucial in ensuring the comprehensive administration of vaccines to children, thereby meeting their fundamental biological physical requirements and preventing illnesses. Pleasant experiences of a mother with herself and others contribute to a favorable attitude towards vaccines (12). The author conducted a documentation research by examining the health card (KMS) of each child. The investigation revealed that the responder had received full basic vaccination for children under the age of five.

Breast milk is the only source of nutrition for infant between the ages of 0 to 6 months. Exclusive breastfeeding can fulfill children's basic needs for physical-biomedical growth and development, emotional affection, and cognitive stimulation (13). Breast milk contains antibodies from the mother's body, which provide protection to infant and protect them from diseases in their early stages of life. Exclusive breastfeeding is very important to prevent disease in children because breast milk can increase the body's immunity and protect children from various diseases that endanger their health. (4). However, the data presented in Table 1 shows that the majority of PKH KPMs do not provide exclusive breastfeeding to their babies. Some respondents stated that breast milk was only started at the age of 6 months. Apart from that, they also believe that breast milk alone is not enough, this causes mothers to provide complementary foods such as bananas, porridge and biscuits before the age of 6 months. The findings of this study are consistent with prior research, which found that the

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The implementation of PKH in Indonesia had no significant impact on exclusive breastfeeding for infant. Exclusive breastfeeding can lead to this issue, which is likely influenced by individual and household variables. There are no special sanctions applied by PKH facilitators to PKH recipients not providing exclusive breast milk (14). This study's results are similar to those conducted in India (15).

Several reasons impede moms from providing exclusive breast milk to their infants for a duration of six months. In addition to variables related to parity, such as the number of previous pregnancies, the mother's knowledge and attitudes towards exclusive nursing, social support is a crucial determinant of the effectiveness of exclusive breastfeeding. The social support in question refers to assistance provided by family members, healthcare professionals, and postnatal health care cadres. According to (16), study conducted in the Pandanaran Primmary Health Care Work Area reveals that family support plays the most significant role in promoting exclusive breastfeeding.

We divide weight measurement into two types: routine, which is conducted monthly, and non-routine, which is not conducted on a monthly basis. The researchers acquired the weight of this BB by consulting the KIA or KMS book that was provided during the postnatal health care visit. Weighing plays a crucial role in identifying abnormalities and deviations in the growth and development of children at an early stage, enabling prompt and suitable interventions. It helps avoid malnutrition in children and provides insights into the overall health and well-being of toddlers. The present study suggest that the majority of mothers, whether PKH recipients or not, routinely take their toddlers to the posyandu to monitor their growth and development. This program has increased the number of beneficiaries attending posyandu to monitor the growth and development of toddlers in Patempuran Village. This is consistent with previous studies in Colombia which have also found stronger effects in rural areas (17). Meanwhile, other studies have found that Mexico's Oportunidades program increased the number of growth monitoring visits by 60% in rural areas(18).

Health services are accessible to the community irrespective of their financial means, enabling individuals to prioritize immunization for their children. According to Table 1, the data from this study indicates that most participants opted for health services at the polyclinic due to its proximity to their homes. The foundation of a health system is in the accessibility, affordability, and precision of healthcare services, which are...
essential for addressing diverse health issues and promoting equal access to health for all individuals. Access to health services is expected to offer preventive, promotive, curative, and rehabilitative care, as well as instil trust and confidence in individuals seeking healthcare. It also aims to influence community behavior patterns in enhancing overall health (19). PKH effectively enhanced the utilization of preventive health services (20).

Consistent with the results of research in Colombia which stated that The Families in Action (FA) programme significantly increased the use of preventive health services. Familias en Accion (‘Families in Action’; FA) is the CCT programme in Colombia and includes both a health and an educational component. A possible explanation is that in poor family's lack of finances, parents prefer non-conventional alternative medicines (17). In this approach, the KPM program improves parents' ability to use health-care resources while their toddler is sick.

Our research found that there was no significant difference in the completeness of basic immunization for toddlers in Patempuran Village between PKH recipients and non-PKH recipients. This shows that the people of Patempuran Village, Kalisat Jember District already have good knowledge and awareness of the importance of complete basic immunization for children to prevent infectious diseases. In addition, basic immunization is usually given to toddlers during posyandu implementation. The location of the posyandu is easy for the public to reach. In accordance with the health service quality management theory stated that access to services is not hindered by geographical conditions, this geographical situation can be measured by the type of transportation, distance, travel time and other physical obstacles that can prevent someone from getting health services (21). Other than children under the age of five have received health services from the community health center without distinguishing between PKH recipients and non-PKH recipients. The results of this research are different from research in Kokop District, Bangkalan Regency, which stated that all of the infant who participated in the Family Hope program had complete immunization status, while the infant who did not participate in the Family Hope Program had incomplete immunization status, this shows that there is a relationship between the Family Hope Program and status of immunization completeness in Kokop District, Bangkalan Regency. In other words, PKH has an impact on the completeness of toddler immunization (22).

The indicators for improving the welfare of the poor are access to capital, enhance the quality of products and
access to marketing, develop business service skills, and develop entrepreneurship and partnerships. Indicators of Community Empowerment can seek their income, help the family economy, get a lot of knowledge about training, and change lifestyle. From the above informants, it is stated that the program can run well if it is supported by an effective organizational structure and management, government policies, and quality assistants in community empowerment. One of the Family Hope Program activities' mechanisms is program socialization, initial meetings with prospective PKH participants, distribution of assistance, access to health services, education, social welfare, and commitment verification (23). Some of our research's limitations include its limited geographical scope (village research area), which prevents us from seeing the influence of PKH in a larger area. This is a cross-sectional survey of all households with toddlers in Patempuran Village, thus beneficiaries are not randomly assigned to treatment or control groups.

CONCLUSION AND RECOMMENDATION

Most children under the age of five have been fully immunized, have monthly weight measurements at postnatal healthcare facilities, and often utilize healthcare services at polyclinics. However, they are not exclusively breastfed. There is no discernible disparity in meeting fundamental biological physical requirements, including as vaccination, exclusive breastfeeding, weight, and usage of health care, between children under the age of five who get PKH and those who do not receive PKH.

The implementation of PKH in Patempuran Kalisat Village, Jember, is considered effective as most children under the age of five have received comprehensive basic immunization and regularly undergo weight measurement. However, a significant number of children under the age of five are not exclusively breastfed. Therefore, it is desirable for social services and community health centers to collaborate in order to provide education on the [ of breastfeeding. Restricted to a select few. In addition to counseling, you may also disseminate messages through other forms of print media such as posters, pamphlets, and so on.

REFERENCES

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