Chapter

Implementation of the Posyandu Program and Healthy Living Behavior of Mothers and Children in Sidomulyo Village, Godean District, Sleman Regency, Yogyakarta Special Region

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Abstract

This study aims to: (1) analyze the continuity of healthy behavior of mothers and children even though their involvement in *Posyandu* is low due to poor *Posyandu* services; (2) analyze the healthy behavior of mothers and children in the community that is institutionalized by the community itself, although at the initial level, it was introduced by *Posyandu*. This research uses a descriptive survey approach. The population of this research is 348 mothers who have babies and toddlers, who are the target of the *Posyandu* service program. The number of samples taken was 100 respondents with a simple random sampling technique because the population was homogeneous. Data were obtained through questionnaires, in-depth interviews, and direct observation. The results showed that the low involvement of mothers in Posyandu was not an obstacle for mothers to behave in a healthy manner on an ongoing basis. This is because in the community there are various formal, semiformal, and village institutions that institutionalize healthy living accompanied by the availability of service facilities outside the *Posyandu* that can be used by mothers to meet the needs of a healthy life. The healthy behavior of mothers and children in the family is included in the high category seen from the frequency of mothers providing nutritious food for the family, maintaining food hygiene, boiling water before drinking, providing complete immunizations to their babies, baby clothes and utensils, conducting pregnancy checkups 7–9 times during pregnancy, using modern health care facilities for childbirth, as well as actively participating as an acceptor for independent family planning.

Keywords: Posyandu program, healthy lifestyle, mother and child

1. Introduction

There are still many obstacles in the way of Indonesia's health development and its goal of improving maternal and child health. Still high rates of maternal and child mortality, as well as malnutrition in babies and toddlers, are indicative of these difficulties. The 2012 IDHS maternal mortality rate (MMR) in Indonesia was calculated to be 359 per 100,000 live births due to complications during or immediately after delivery [1, 2].

Deaths among infants (IMR) and young children (under-5 mortality rate, AKBAL) occur at a rate of 32 and 29 per 1000 live births, respectively (www.depkes.go.id). Since 1982, the government of Indonesia has used the primary health care (PHC) plan to pursue health development with the aim of lowering maternal and infant mortality rates. Community health centers (Puskesmas) use a primary health care approach, seeing patients as their first point of contact when they are ill and acting as a referral hub for more advanced medical care [3].

The government established the integrated service post program (Posyandu) in response to geographical challenges, a shortage of medical professionals, and the community health center's expansive service area, all of which made it difficult to provide accessible public health services, especially those focused on mothers and children [4, 5].

Family planning services (KB), maternity and child health (KIA), vaccination, nutrition enhancement, and diarrhea prevention make up Posyandu's basic service package as a health care institution offered by the government to rural communities. Nutrition counseling, family development for toddlers, dengue hemorrhagic fever, child care, food processing, and the promotion of healthy living are only some of the other initiatives carried out *via* counseling [6, 7].

It seems that the strategy of relying on the target population's (mothers and children) visits to the Posyandu to achieve service program coverage has not been successful. Visits to Posyandu by pregnant women, babies, and toddlers, as measured by the Ministry of Health's own data collection methods (1997 report), indicate that Posyandu is still not widely used in the community. Coverage for family planning services is 32.40%, with 8.99% of pregnant women seeing Posyandu, 23.51% of newborns, and 67.51% of toddlers [8].

Because the Posyandu service program places an emphasis on preventative health services, including vaccination, pregnancy checkups, and child weighing, community participation in Posyandu has dwindled. The unpredictability and lack of consideration for the activities of the local community in setting the Posyandu's service schedule is a major factor in the low rate of mother participation. We may, thus, infer that subpar Posyandu services will work against efforts to boost citizen participation in Posyandu.

The success of a development program depends on three factors aligning perfectly: the needs of the beneficiary and the outcomes of the program; the requirements of the program and the actual capabilities of the auxiliary organizations; and the recipients' ability to express needs and the decision-making processes of the auxiliary organizations. If Posyandu is able to tailor its services to the need of the local population, it will play a part in enhancing the community's health, as shown by this research [9].

Affordability, timeliness, and precision in medical care are all indicators of rising service quality. The capacity, outlook, and demeanor of service officers in their dealings with members of the community as service receivers are decisive in ensuring

the execution of excellent service. Police personnel may demonstrate courtesy and friendliness in these encounters. Posyandu's decision-making process, as well as the ease with which demands may be communicated, will influence the extent to which the organization can gain public support [10].

The democratic method, which places a great deal of responsibility above the community, and the autocratic approach, which holds that people are fully responsible, work together to ensure that those with the right to act and educate the community are the ones who do so. Since the success of development depends on community engagement and the support of local resources, including labor, finances, and facilities [11], Posyandu will obtain support from the community if it employs a democratic method in decision making.

At the community level, development success may be gauged by how well the Posyandu program has been ingrained into people's daily routines. Institutions in the community and other groups may help with the institutionalization process. The organization is a set of official and informal roles that everyone understands and plays. The institution, however, is understood to be a social standard and pattern of conduct that occurs in order to accomplish certain ends. Meanwhile, various constraints on institutions make patterned behavior a sequence of social connections that occur in communities or groups. Patterned behavior is now a shared feature of our society as a whole [12].

Promoting healthy lifestyles is the ultimate aim of health initiatives, such as Posyandu. There are three types of influences on behavior: (i) predisposition, which includes individual knowledge, attitudes, traditions, and social norms; (ii) enabling factors, which include the accessibility of health service facilities; and (iii) reinforcing factors, which include the attitudes and behaviors of health workers. The high expense of transportation and treatment, as well as the difficulty in accessing medical facilities, are two examples of nonbehavioral issues. There are many different types of healthy lifestyle choices, including those that affect one's physical and mental health, as well as one's approach to food and the environment [13, 14].

The presence of Posyandu, a health service institution, is an indicator that people in rural regions have access to health care resources. Both governmental and grassroots institutions have contributed to shaping modern civilization. Community health centers, sub-health centers, village maternity boarding schools (Polindes), village drug posts, village midwives, and skilled traditional healers are all examples of those who actively participate in delivering health services. Village Community Empowerment Institutions (LPMD), Family Welfare Empowerment (PKK), Dasa Wisma Group, Toddler Family Development Groups, Craftsmen Groups, arisan, and so on all serve to inculcate and encourage villagers to live healthily [15, 16].

Given the above, the study's primary concern is whether or not mothers and children's healthy behavior would persist in the face of their low engagement in the Posyandu as a result of the poor quality of Posyandu services. Second, even if Posyandu was the one who first presented the concept of good parenting to society, how is it being institutionalized by the community itself?

2. Methods

The purpose of this research was not to test hypotheses but to provide a descriptive survey. This study also included in-depth interviews with respondents and many informants to supplement the data collected through questionnaires. Researchers not

only conduct in-depth interviews but also actively participate (observer as participant) in Posyandu services in order to observe, comprehend, query, and document all phenomena that emerge throughout the course of a Posyandu service [17]. Sidomulyo Village in Godean District in Sleman Regency in Yogyakarta, a special province, was the site of the study. Firstly, Sidomulyo Village is highly typical for other villages in Godean District due to its relatively homogenous degree of Posyandu development and community features; and secondly, Sidomulyo Village has never been employed as a comparable study site before.

In this study, the population was mothers who had newborns and children under five at the time the research was carried out, with the consideration that they were the focus of the Posyandu service program. There are 348 individuals in all, living in eight different Posyandu (hamlet). Random sampling was used for the sampling process. The sample size collected from the population is 30%, which is carried out proportionately for each Posyandu by lottery. A total of 100 participants were included in the sample. The study variables associated with the issue and the unit under investigation were described by the processing of descriptive statistical data (descriptive statistics). In this research, the mother-child dyad serves as the unit of analysis. So, the mother is the unit of analysis at the individual level, since the child's healthy behavior mirrors the mother's good conduct [18, 19].

3. Results and discussion

3.1 Implementation of the Posyandu service program

Each Posyandu is required to carry out at least five different program packages as part of the implementation of the Posyandu service program. These program packages are collectively referred to as minimum service activity packages. Improving nutrition is one of these five programs, along with mother and child health (MCH), family planning (KB), vaccination, and preventing diarrheal illnesses. The supplemental feeding package (PMT) is also a part of the nutrition improvement program (P2-Diarrhea). It is clear from the findings of the field study conducted in Sidomulyo Village that not every Posyandu is capable of doing each and every one of these basic service activity packages [20].

Participant observations led to the discovery that the types of Posyandu services in Sidomulyo Village that were carried out by 40% consisted of two types of services: nutrition services (20%) and maternal and child health services, particularly services for weighing toddlers (20%). The findings of this discovery were based on the fact that 40% of the village's residents were surveyed. Family planning and diarrhea prevention were not included among the three categories of services that were not provided since they were not implemented. The insufficient nature of the Posyandu service, which places the utmost emphasis on weighing toddlers, gives the impression that Posyandu is primarily a weighing station for children under three years old.

The results of field research can be used to get an idea of what people think of Posyandu as a post for weighing toddlers. The results showed that 85% of respondents stated that it was not suitable, while only 3% stated that it was suitable. This gives the impression that Posyandu is not an appropriate post for weighing toddlers. The number of respondents who claimed that it was suitable was made up of responses from mothers who had toddlers; hence, the most clear need was to manage the health progression of toddlers *via* activities including weighing. Even while the vast majority

of respondents (85%) said that they were qualified, they in fact need additional sorts of services, including counseling on family planning, vaccination, extra food (nutrition parks), and counseling on environmental health. According to the findings of the poll, an overwhelming majority of respondents (88%) claimed that the service for the registration desk went well, while just 5% of respondents stated that the service was not smooth. On the other hand, with regard to the second table (weighing), as many as 97% of the respondents claimed that the service was operating well, while just 1% of the respondents stated that it was not operating smoothly.

As for the recording of the findings (table three), the majority of respondents indicated that they were up to date, which is represented by the percentage 90% of respondents who stated that they were current and the percentage 3% of respondents who stated that they were not current. Posyandu gives the appearance of being a toddler weighing station due to the fact that registration, weighing, and the recording of results all go through without a hitch [21].

It was discovered that as many as 38% of respondents stated that it was not operating smoothly for the fourth table (individual counseling/referring), and it was discovered that as many as 38% of respondents stated that it was not operating smoothly for the fifth table (KB-Health services). In the meanwhile, according to the responses of those who were asked about the sufficiency of the Posyandu amenities in Sidomulyo Village, it would seem that the facilities that are enough are mostly those that are administrative in nature. In the meanwhile, essential facilities or equipment, such as cooking utensils, contraception, as well as tables and chairs, are in short supply. Even the respondents themselves expressed their opinion that these amenities were inadequate in some way. As many as 65 respondents indicated that there was an insufficient supply of cooking utensils, as many as 35% of respondents stated that there was an insufficient supply of contraceptives, and as many as 33% of respondents stated that there was also an insufficient supply of table and chair facilities [7].

3.2 Mother and child involvement in Posyandu

The involvement of mothers and children in Posyandu activities can be seen from the frequency of mother and child visits in utilizing the services available at the Posyandu. This can be seen from the variations in the answers of mothers (respondents) to the frequency of visits to Posyandu. The results of the study explained that as many as 57% of respondents stated that the utilization of family planning services at Posyandu was very low; this was related to the quality of family planning services provided. The low quality of family planning services causes mothers to be more inclined to carry out family planning services at the local doctor, midwife, or health center.

For prenatal checks, most of the respondents stated that they were very lacking in utilizing the service, namely 55%. The lack of utilization of this service is not due to the reluctance of Posyandu participants but rather due to inadequate service factors such as the absence of technical staff at the Posyandu (e.g., midwives) to examine mothers, lack of adequate facilities, and infrastructure, for example, a blood pressure measuring device. The lack of quality of antenatal care services has caused most mothers to use the services of doctors, midwives, or Puskesmas as a place to carry out prenatal checks [22].

For immunization services, it was shown that the majority of respondents stated that the quality of immunization services was very poor, namely as much as 50%. This lack of immunization services is mainly caused by the dependence of immunization

services on the presence of midwives at the Posyandu who bring vaccines as needed. Because the vaccines are stored at the Puskesmas, and if on Posyandu open days the midwives do not bring the vaccines, the immunization services are abolished [23].

In the case of giving ORS, the majority of respondents also stated that their visit to this type of service was lacking, namely as much as 48%. The low involvement of mothers in this type of ORS service is due to a lack of ORS supplies at the Posyandu. This is also due to the fact that the supply of ORS at Posyandu is highly dependent on distribution from the Puskesmas. The types of Posyandu services that show the high involvement of respondents in utilizing the service are weighing children under five, giving vitamin A for toddlers, and providing additional food.

The involvement of mothers and children in Posyandu activities can also be seen from the participation of mothers in the payment of health fund contributions (IDS). The results of the study explained that 48% of the respondents paid contributions to the health fund (IDS). While mothers who do not make IDS payments are as much as 38%. The amount of health fund contributions (IDS) among Posyandu varies, but field findings show that health fund contributions (IDS) range from IDR 1000.00 to IDR 1500.00 for each mother.

Mothers' involvement in Posyandu activities can also be seen from the frequency with which mothers provide donations/assistance in procuring service facilities needed by Posyandu. The results of the study found that most of the respondents had never contributed to the provision of Posyandu service facilities, namely 62% and there were 22% of respondents who stated that only occasionally, while 16% stated that they often made donations to procure Posyandu service facilities. Forms of donations include money, food, medicines, and vitamins.

The involvement of Posyandu participants in service activities can also be seen from their involvement in discussing Posyandu issues. The results of the field findings revealed that the respondents' answers varied quite a lot in terms of involving these members. As many as 40% of respondents feel that they are always involved in discussing problems in the Posyandu. Meanwhile, another 40% feel that they are only occasionally involved in discussions about the ins and outs of Posyandu service activities. Meanwhile, there were 20% of respondents who said they had never been involved in discussing problems in Posyandu services. This means that the decision-making system has not run democratically so it can affect their involvement in Posyandu.

3.3 Healthy behavior of mother and child

Field data showed that the majority of respondents in this survey lead healthy diets and diet-related lifestyles, with 71% of participants reporting that they regularly serve healthy meals for their families. Rice, tempeh, tofu, pork, fish, eggs, carrots, beans, kale, and fruits, as well as vegetables, milk, and iodized salt, are all eaten to provide for his family's nutritional requirements. Most people already have a good grasp on the value of a healthy diet, therefore it is not commonly questioned whether or not to provide wholesome meals. Most respondents also had incomes above Rp. 750,000.00, which means they are able to afford to regularly serve healthy meals. They will be able to afford enough food to suit their dietary requirements with this sum of money. In contrast, 29% of respondents said they only sometimes supplied healthy meals for their family, and 0% said they never did. It is not that they do not understand the need of maintaining a healthy lifestyle by eating well, but rather that financial constraints at home make it difficult to do so. A mother's involvement

in family planning programs is an indicator of her commitment to healthy lifestyle choices, especially those that promote her reproductive health (KB).

The majority of respondents (74%) actively accepted family planning, according to the data from the field. Eleven percent, however, reported being less active, while 15% indicated they did not exercise at all. Most of the respondents at the research sites were now independent family planning participants; that is, they could afford to pay for services from private midwives or practicing physicians, which explains the large number of active family planning acceptors at the study sites.

A mother's propensity to attend prenatal visits is another indicator of her overall health throughout pregnancy. Women who are expecting children are offered prenatal care at regular intervals. During pregnancy, women should see a Puskesmas or midwife at least four times (K1–K4) for checkups (antenatal care). According to the data collected in the field, just 8% of pregnant women went in for between one and three prenatal checkups, while 35% went in for between six and seven and 57% went in for between seven and nine. This indicates that expecting women are well aware of the need of prenatal care. This indicates that the mother is practicing exemplary prenatal hygiene [24].

When it comes to delivering their children, field data indicated that as many as 7% of respondents used a traditional birth attendant, 80% used a midwife, and 13% used a doctor or medical professional in some capacity. Due to the fact that most respondents have given birth with the assistance of a midwife or doctor and just a small number have sought the services of a dukun beranak, it is evident that the mother's healthy behavior is high.

Immunizations against diseases, including diphtheria, pertussis, and tetanus (DPT), hepatitis-B, polio, measles, and Bacillus Calmette Guerin (BCG), are a good indicator of a mother's dedication to keeping her child healthy. Findings from the field showed that almost nine in ten respondents vaccinated their infants and toddlers entirely, with 3% providing just partial vaccinations and 8% reporting that they did not vaccinate at all.

Mothers' healing behavior may be inferred from the lengths they go to in order to treat their children, just as it can be from the measures they take to protect them from illness. When respondents' children were under the age of five and unwell, the majority took them to a midwife (64%), a community health center (64%), or a community health center (80%). Midwives, health centers, and auxiliary health centers are frequently visited by parents who have brought their sick children there because they are reliable, accessible (*via* walking or public transportation), inexpensive (relative to other medical options), and open to people of all socioeconomic backgrounds.

The results of the fieldwork indicated that all respondents boiled their drinking water before ingesting it, which is a healthy practice for families. In addition, research from the field shows that 42% of people who have latrines at home utilize them. Those who fall within this group of respondents understand the significance of maintaining a clean environment and taking measures to eliminate potential health hazards in the comfort of their own homes. However, 13% of respondents reported using a public restroom and 45% reported not having access to a private lavatory in their homes.

The respondents' high socioeconomic status, represented in their education and income levels, is a key factor in the achievement of the aforementioned healthy behavior of mothers and children. Findings from this research show that the vast majority of respondents are well educated, with 43% having completed high school and 7% having completed college or university, and that over half (52%) earn more

than IDR 750,000.00 per year. Mothers with higher incomes will have an easier time affording the costs of a healthy lifestyle, and mothers with higher levels of education will be better able to appreciate the significance of maintaining a healthy lifestyle.

4. Conclusion

Subpar service hindered the Posyandu program's rollout. The inability of Posyandu to provide all sorts of services, poor quality service systems, and insufficient service facilities and equipment all contribute to the quality of service that customers get. Because Posyandu only provides weighing services for toddlers and nutrition services, whereas women additionally require prenatal care, vaccination, family planning, and treatment for diarrhea, poor mother participation in Posyandu might be attributed to this mismatch. Posyandu only captures a fraction of the community's mothers and children's healthy behaviors. Most of their knowledge about how to live a healthy life comes from sources other than the Posyandu, such as community health centers, sub health centers, private midwives, and medical professionals. The high levels of education and wealth within the family help to prove this. Even if mothers are not actively participating in Posyandu, this does not prevent them from exhibiting positive health habits in the long run. This is due to the availability of service facilities outside the Posyandu that mothers may utilize to satisfy their daily requirements, as well as the presence of numerous formal, semiformal, and rural institutions that institutionalize healthy living.

But the regularity with which mothers offer nutritious meals for the family, maintain food hygiene, boil drinking water first, give their newborns full vaccines, and bathe their babies twice a day all fall into the "high" category of healthy family behavior, as well as being independent-KB participants, who practice cleanliness in all aspects of their lives (eating, drinking, dressing, and caring for baby equipment), who visit their doctors 7–9 times during pregnancy, who utilize contemporary health service centers for delivery assistance, and who actively engage in these practices.

Since Posyandu is not the only health care facility available to mothers, the healthy behavior of mothers and children will persist even with minimal participation. In rural areas with a high standard of living, residents choose not to employ Posyandu services in favor of more contemporary medical options.

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References

[1] Halfon N, Larson K, Lu M, Tullis E, Russ S. Lifecourse health development: Past, present and future. Maternal and Child Health Journal. 2014;**18**(2):344-365

[2] Organization, W. H. World Health Statistics 2016: Monitoring Health for the SDGs Sustainable Development Goals. World Health Organization; 2016

[3] MacDorman MF, Mathews TJ, Mohangoo AD, Zeitlin J. International Comparisons of Infant Mortality and Related Factors. United States and Europe; 2010

[4] Nirwana MD, Utami IH, Utami HN. The cadre of integrated health service post (Posyandu) as an agent in the socialization of cervical Cancer prevention in Malang regency, Indonesia: A cultural approach. Procedia-Social and Behavioral Sciences. 2015;**211**:681-687

[5] Pratono AH, Maharani A. Long- term care in Indonesia: The role of integrated service post for elderly. Journal of Aging and Health. 2018;**30**(10):1556-1573

[6] Apanga PA, Adam MA. Factors influencing the uptake of family planning services in the Talensi District, Ghana. Pan African Medical Journal. 2015;**20**(1):1-9

[7] Gavin L, Moskosky S, Carter M, Curtis K, Glass E, Godfrey E, et al. Providing quality family planning services: Recommendations of CDC and the US Office of population affairs. Morbidity and Mortality Weekly Report. Recommendations and Reports. 2014;**63**(4):1-54

[8] Kadarina TM, & Priambodo R. Preliminary design of internet of things (IoT) application for supporting mother and child health program in Indonesia. 2017 International Conference on Broadband Communication, Wireless Sensors and Powering (BCWSP). 2017. pp. 1-6

[9] Julian R. Is it for donors or locals? The relationship between stakeholder interests and demonstrating results in international development. International Journal of Managing Projects in Business. 2016;**2016**

[10] Syed SB, Leatherman S, Mensah-Abrampah N, Neilson M, Kelley E. Improving the quality of health care across the health system. Bulletin of the World Health Organization. 2018;**96**(12):799

[11] Lunenburg FC. The decision making process. National Forum of Educational Administration & Supervision Journal. 2010;**27**(4)

[12] Fosu AK. Achieving Development Success: Strategies and Lessons from the Developing World. Oxford University Press; 2013

[13] Grembowski D. The Practice of Health Program Evaluation. Sage Publications; 2015

[14] Schell SF, Luke DA, Schooley MW, Elliott MB, Herbers SH, Mueller NB, et al. Public health program capacity for sustainability: A new framework. Implementation Science. 2013;**8**(1):1-9

[15] Abuse S. Mental health services administration. Results. 2013;**2**:13

[16] Bowling A. Research Methods in Health: Investigating Health and Health Services. McGraw-hill Education (UK); 2014

[17] Showkat N, Parveen H. In-depth interview. Quadrant-I (e-text). 2017;**2017**

[18] Acharya AS, Prakash A, Saxena P, Nigam A. Sampling: Why and how of it. Indian Journal of Medical Specialties. 2013;**4**(2):330-333

[19] Emerson RW. Convenience sampling, random sampling, and snowball sampling: How does sampling affect the validity of research? Journal of Visual Impairment & Blindness. 2015;**109**(2):164-168

[20] Closa-Monasterolo R, Gispert-Llaurado M, Canals J, Luque V, Zaragoza-Jordana M, Koletzko B, et al. The effect of postpartum depression and current mental health problems of the mother on child behaviour at eight years. Maternal and Child Health Journal. 2017;**21**(7):1563-1572

[21] Gatto NM, Ventura EE, Cook LT, Gyllenhammer LE, Davis JN. LA sprouts: A garden-based nutrition intervention pilot program influences motivation and preferences for fruits and vegetables in Latino youth. Journal of the Academy of Nutrition and Dietetics. 2012;**112**(6):913-920

[22] Agha S, Tappis H. The timing of antenatal care initiation and the content of care in Sindh, Pakistan. BMC Pregnancy and Childbirth. 2016;**16**(1):1-9

[23] Assija V, Singh A, Sharma V. Coverage and quality of immunization services in rural Chandigarh. Indian Pediatrics. 2012;**49**(7):565-567

[24] Perry GS, Patil SP, Presley-Cantrell LR. Raising awareness of sleep as a healthy behavior. Preventing Chronic Disease. 2013;**10**