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Research Article

## Policy Analysis for Anemia and Pregnant Women Care Elevation Program Through Prospective Bride's Preparation

Peni Cahyati<sup>1\*</sup>, Sinar Pertiwi<sup>2</sup>, Siti Saadah Mardiah<sup>2</sup>, Dede Gantini<sup>2</sup>, Wawan Rismawan<sup>3</sup><sup>1</sup> Tasikmalaya Health Polytechnic Nursing Department West Java, Indonesia<sup>2</sup> Tasikmalaya Health Polytechnic Midwifery Department West Java, Indonesia<sup>3</sup> Bakti Tunas Husada University, Nursing Departement, West Java, Indonesia

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#### \*Address for Correspondence:

Peni Cahyati, Tasikmalaya Health Polytechnic Nursing Department West Java, Indonesia

### Abstract

**Background:** The percentage of pregnant women experiencing anemia in Indonesia has increased 37.1% compared to 2018 Riskesdas. The incidence of stunting is also influenced by the anemia and nutritional status of the mother during pregnancy. The implementation of 1000HPK has been widely implemented in all districts and cities throughout Indonesia but there are still obstacles in policy integration and cross-sector coordination caused by a lack of understanding of the program so that priority placement is not determined. **Aim:** to obtain policy recommendations for improving programs to prevent and alleviate anemia and Chronic Energy Deficiency (CED) for pregnant women through the process of prospective bride's preparation. **Research method:** The method used Action research with 3 stages. The sample are key persons of 1000 HPK program which are Public Health Office, BKKBN, Midwifery and Nursing Health Providers, and Regional Ministry of Religion (Kemenag and KUA). 24 people participate in FGD and 5 people for the In-depth Interview which was carried out at a place agreed upon by the respondents. **Results:** of the research provide recommendations for the need for collaboration between schools and universities for health education, schools and community health centers in providing blood supplement tablets, the need for an SOP for administration flow and procurement flow for Fe tablets as well as evaluation and monitoring. Modifying Fe tablets to make them popular with teenagers, creating health check formats for use, utilizing research and community service results and utilizing digital-based communications. **Conclusion:** achieving the goals of the anemia policy program requires cooperation and collaboration between various stakeholders.

**Keywords:** Policy, Anemia, CED, Pregnant Women, Prospective Brides

## Introduction

Nutritional anemia in Indonesia is still one of the main nutritional problems and most often occurs during pregnancy<sup>1-5</sup>. Iron deficiency anemia is anemia that occurs due to iron deficiency so that the formation of red blood cells and other functions in the body are disrupted<sup>6</sup>. Almost half of pregnant women in Indonesia experience anemia or lack of blood. According to the Indonesian Ministry of Health as many as 48.9% of pregnant women in Indonesia experience anemia<sup>5,7-10</sup>.

Anemia not only affects the mother, but also the baby being born. Babies who lack iron can have an impact on the growth of brain cells which can later reduce the child's IQ. Apart from that, the incidence of stunting is also influenced by the anemia and nutritional status of the mother during pregnancy. Events that cause maternal death are closely related to nutritional intake, for example bleeding is a result of iron deficiency, hypertension is also related to nutritional intake. Based on the 2016 PSG (Nutritional Status Monitoring), 53.9% of pregnant women experienced an energy deficit<sup>11-16</sup>.

The implementation of 1000HPK has been widely implemented in all districts and cities throughout Indonesia but there are still obstacles in policy integration and cross-sector coordination caused by a lack of understanding of the program so that priority placement is not determined. The bride and groom

preparation program is carried out by the KUA while the examination is carried out by the Public Health Center or independent practices with examination standards that are not necessarily the same. Health care for prospectus brides record is not central to the local Public health Centre making efforts to implement 1000 HPK in prospective bride and groom couples not optimal and not recorded completely<sup>5,6,7</sup>.

In Tasikmalaya City the number of pregnant women with anemia is 10.4%, pregnant women with CED 5.7%. Fe Tablet coverage for young women is 40% of the target number of middle school - high school students aged 12-18 years. The program for giving Fe to young women is carried out by all Community Health Centers in Tasikmalaya City. Better understanding of programs implementation can help further optimization<sup>17-20</sup>.

## Research Methods

### METHOD

**Research method** The method used in this research is action research as part of the evaluation of programs for preventing and alleviating nutritional problems related to stunting. Evaluation of this program will be carried out in three stages as follows: **Stage I:** Identification and prioritization of problems in this stage is carried out by activities to determine and obtain a basic picture of nutrition problems and nutrition programs in the research area. At this stage, observations are made and

identification of factors related to the health system that could influence program implementation in the area. Characteristic data is preferably taken from secondary data sources in the form of routine reports in the target city and based on the study of policy documents. Qualitative data collection was carried out using interview methods with 5 policy stakeholders in Tasikmalaya City related to the program and 4 Focus Group Discussions with a total of 24 respondents consisting of program implementation staff and policy observers. Sample selection was carried out using the snow-balling method. Data triangulation was carried out by interviewing different policy stakeholders and based on researcher observations. **Stage II:** Data analysis Based on the data collected in the first stage, policy analysis was carried out, analysis related to service flow and Prospectus bride inspection documentation. **Stage III:** Making recommendations for program improvements. At this stage, recommendations for program flow, service standards

and documentation of inspection results are prepared. From the recommendations prepared, the most effective and implementable recommendations were then selected to be tested on the research population<sup>21-28</sup>

## Results And Discussion

### RESULTS

Based on search results using the Word Frequency Query feature of QSR NVivo 12 software from various data sources that have been imported, the word 'prospectus bride' is the word with the highest frequency, namely 1.72% of all research data sources, followed by the word 'teenager' 1.25 %, program 1.17%, anemia 1.14%, and health 1.03% from all research data sources. Figure 1 below shows a Word Cloud of the 30 dominant words used in this research data source.

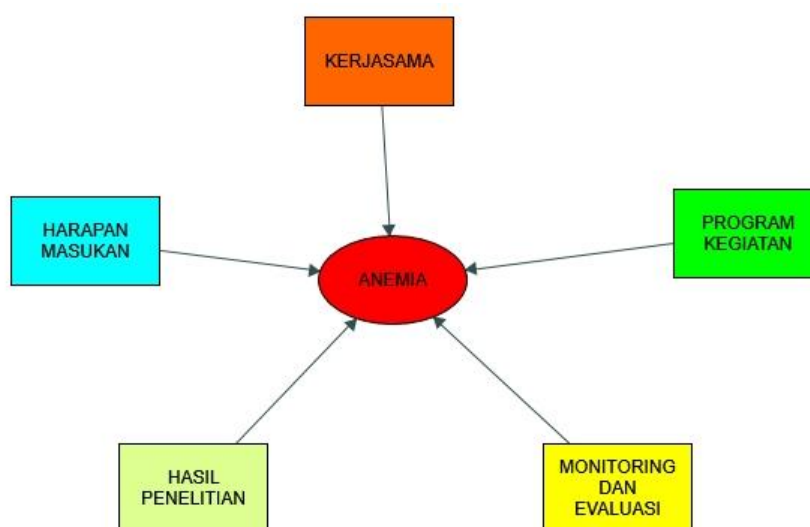


Figure 1. Concept of Word Connectivity (Themes)

Based on Figure 1 above, it can be explained that there is a connection between cooperation, expectations or input, research results, program activities and monitoring and evaluation of the incidence of anaemia.

## Discussion

### 1. Activity Program

#### Education authorities

The program for providing blood supplement tablets (TTD) has been implemented approximately 5 years ago and has been carried out in all junior and senior high schools, both public and private. This is in accordance with Minister of Health Regulation no. 88 of 2014 concerning Standards for Blood Supplement Tablets for Women of Childbearing Age and Pregnant Women. The aim of the activities carried out in schools is to prevent anemia, although there are still many teenagers who refuse to consume blood supplement tablets, in line with Oktavia's research on the behavior of consuming blood supplement tablets, it was found that the majority of respondents did not know about blood supplement tablets<sup>4-11,13,24,29-31</sup>.

#### Ministry of Religion

The Binwin program has been implemented for the past 3 years, in collaboration with the Health Service, BKKBN, but has not been optimal, because people still cannot register their marriages 3 months in advance by online service. The Ministry

of Religion still finds many obstacles such as SIMKAH program that has been created is still not in synergy with the Health Office, BKKBN and Education Department programs. In the Ministry of Religion there is Bimwin (marriage guidance), Guidance for school-age teenagers, Guidance for married-age teenagers. BRUSH and BRUN. Some people have Bimwin every week<sup>32,33</sup>.

#### BKKBN

The Elsimil application is actually owned by the BKKBN to make prospectus bride registration easier, but this application does not yet synergize with the Health Office, Education Department, Ministry of Religion. The socialization of the Elsimil program has not yet been exposed to the community and related agencies, so this application is still not full implemented. At BKKBN the approach is from upstream with the target of prospectus bride. The policy in the family planning service is Presidential Decree No. 72, the strategy is to use a family support team (family midwives, PKK cadres and family planning cadres). 552 teams with around 1565 cadres moving. For prospectus bride, the Ministry of Religion has coordinated with the Ministry of Religion, like to be invited as a resource person for Bimwin, but the quantity is not yet routine, perhaps it is related to the budget.

## Public Health Office

The program for providing TTD has been implemented by the Health Department, but monitoring and evaluation of TTD consumption by middle school and high school students has not been fully monitored. Special UKS and Kespro programs (targeting prospectus bride and teenagers). PKM Sambongpari is currently trying to enter high school to provide biology and Kespro material (related to stunting and anemia). All UKS teachers and Biology teachers were gathered and then discussed whether material related to Kespro and prospectus bride could be included in the PBM material<sup>17,34</sup>.

## 2. Cooperation

Based on what is stated in the Decree of the Director General of Community Guidance Number 1012 of 2022, cooperation between the Ministry of Religion (KUA) and schools is needed. The implementer of youth guidance is the District KUA and/or other institutions, other institutions are social religious organizations/educational institutions/universities/other institutions that have signed a cooperation agreement for fostering sakinah families with the Director General of Islamic Community Guidance, Ministry of Religion of the Republic of Indonesia. One of the obstacles as stated in Adhika's research results (2023) is that they have not been able to synchronize the KUA schedule with the school because the school can only provide time for premarital marriage guidance for teenagers of this age when there are no learning hours<sup>4,11,35</sup>.

There is already a program which is a collaboration between the BKKBN (BP2KBP3A) and the Ministry of Religion (Kemenag) by issuing a circular use of the Electronic Application-Ready for Marriage and Pregnancy (Elsimil) which states that the Elsimil certificate is a requirement for complete marriage administration. Presidential Regulation Number 72 of 2021 concerning the acceleration of stunting reduction is one of the priority activities contained in the National Action Plan for the Acceleration of Stunting Reduction which includes the implementation of the Elsimil application, and the implementation of the Elsimil application is carried out by the Family<sup>14,30,31</sup> Assistance Team (TPK) consisting of Village/Kelurahan PKK Mobilization Team Cadres, Midwives and Family Planning Cadres to provide assistance to families at risk of stunting<sup>9,10</sup>.

Based on the results of this research, collaboration is needed between the Ministry of Religion (KUA) and the Community Health Center. Partnership opportunities between UPTD Puskesmas and KUA are very important in preventing stunting. As has been explained, stunting interventions need to pay attention to the right timing, one of which is in the pre-pregnancy period by preparing the health of the prospective mother in an optimal healthy condition. Interventions carried out during the pre-pregnancy period can provide knowledge support to couples in planning a pregnancy by identifying the mother's age as a risk factor for stunting and also the mother's nutritional status before pregnancy<sup>24,36,37</sup>.

In a joint regulation between the Minister of Education and Culture of the Republic of Indonesia, the Minister of Health of the Republic of Indonesia, the Minister of Religion of the Republic of Indonesia and the Minister of Home Affairs of the Republic of Indonesia Number 6, Number 73, Number 41, Number 81 of 2014 states that in order to improve the quality of education and learning achievements of participants students who pay attention to healthy behavior and living environments, need guidance and development of school/madrasah health efforts in every school/madrasah<sup>22,27,38</sup>.

UNICEF initiated the AKSI BERGIZI activity This program is designed in line with the national policies and programs of

UKS/M (School/Madrasah Health Enterprises. The Bergizi Action Program was prepared together with four ministries, namely the Ministry of Health, Ministry of Education and Culture, Ministry of Religion and Ministry of Home Affairs. There are several things that need to be corrected or improved, such as making breakfast and TTD consumption uniform and following the Governor's Circular, namely every Friday, updating or making a SK for the UKSM Regency Level Advisory Team, including nutrition education in the curriculum, providing guidance to canteen keepers regarding the nutritional components of the canteen. healthy. We hope that with this monitoring and evaluation as a medium to discuss all the obstacles and solutions that are present, they can be implemented and increase the coverage of the UKS Trias in Healthy Schools/Madrasahs<sup>2,6,21,25,28,35,39-41</sup>.

Universities have a very important and strategic role to help overcome the stunting problem that occurs in Indonesia. Based on Presidential Decree Number 72 of 2021 as a derivative guideline for implementing the National Action Plan for the Acceleration of Stunting Reduction (RAN PASTI), universities are included in the structure as Monitoring Coordinators for Evaluation of the Acceleration of Stunting Reduction. One of the roles of universities is to help the community, especially in providing healthy, varied and balanced nutrition<sup>17,20</sup>.

## 3. Monitoring and Evaluation

The activity program implemented in schools in the form of providing TTD to young women has been carried out periodically in all junior and senior high school educational institutions but there<sup>19,24,42</sup> are no efforts for assistance or compliance with the consumption of FE tablets. There have been no activities related to checking HB levels or educational efforts to improve nutrition rich in FE content. According to Mira and Adhila's research, several obstacles were found in the results of the monitoring and evaluation of the TTD program, namely that there were discrepancies in the input aspects of facilities and infrastructure. In the process aspect, nonconformities occur in the distribution, monitoring, recording and reporting aspects. In the output aspect, discrepancies occur in target accuracy, time and distribution.<sup>1,16,21</sup>

The UKS activity program at school has not yet touched on youth professional development education activities. UKS in schools and at Community Health Centers focuses on the scope of health services, such as extracurricular activities of the Youth Red Cross (PMR), Youth Health Cadres (KKR), first aid in the UKS room, provision of medicines<sup>33,35</sup>.

The Binwin program still finds problems related to compliance with the implementation of prospectus bride participants and the availability of implementation funding as well as cross-program coordination with the Community Health Center and BKKBN. According to PMK concluded, socialization and education on the importance of bimwin needs to be intensified for prospective brides and grooms, not only in the Islamic religion but also for all religions; health requirements are mandatory requirements for all prospective brides and grooms throughout Indonesia from all religions; The Ministry of Religion is implementing the prospectus bride's obligation to fill in complete data and implement bimwin as a condition for obtaining a marriage book; It is hoped that medical tests for prospective brides and grooms can be free from fees<sup>20,26,41</sup>.

The monitoring and evaluation of the BKKBN program regarding the Elsimil program is that the accessibility aspect is not evenly distributed and the network and participant information data has not been coordinated with the Health Service or KUA<sup>11,36</sup>.

#### 4. Research Result

Research results related to the role of higher education are in the downstream aspect of research results. Conceptually, "research downstream" is interpreted as further development of research results and innovation so that they can be utilized by society<sup>4</sup>; or as a procedure or way to bring research and innovation results closer to users, namely the general public, government institutions, or industry<sup>4</sup>. In Rogers' theory, 1983, downstreaming is the activity of diffusing research and innovation results to the community in order to improve the standard of living of the community or to empower the community. The downstreaming of this research is in line with the change in scientific paradigm from "science for science" to "science for society". The ratio of solutions to social problems to science is none other than because science as "the greatest collective endeavor" of humans through research and innovation activities is believed to not only be able to provide theoretical-scientific solutions, which are solely for the benefit of the development and progress of science itself (epistemologically and ontologically). Science as a product of research and innovation is also believed and proven to have practical-pragmatic benefits in order to improve the quality of life and progress of society (axiological)<sup>6,7,9,10,13,14,29,30</sup>.

The results of the research that has been carried out are in the form of Homecare care and community care in the aspect of anemia management. The material provided in the How to Prevent Anemia community is: Eat nutritious food, especially sources of iron, especially animal foods, nuts and green vegetables. Take one blood-enhancing tablet once a week and every day during menstruation. Apart from education, assistance is also provided with the consumption of Fe tablets to increase the level of compliance<sup>15,17,19,32-34,38,43</sup>.

Input regarding the initiation of PT collaboration with state educational institutions and those under the Ministry of Religion needs to be made to optimize the implementation of Tri Dharma PT. Several research results in the form of applications have been found, especially for education and reminder applications regarding the level of compliance with Fe tablet consumption. This can be implemented in the community for effectiveness and access via digital ports<sup>27</sup>.

#### 5. Hope and Feedback

Research on policies to improve programs for preventing and alleviating anemia and CED for pregnant women through the preparation process for prospective brides. From the results of FGDs and in-depth interviews with related agencies, namely the Health Office, Ministry of Religion, DP2KBP3A, Education Department, it was found that there were obstacles in preventing anemia in pregnant women through preparation of the prospective bride and groom. **Public Health Office:** Weak monitoring of tablet administration in schools, teenagers do not want to consume Fe tablets because of the side effects of Fe tablets, namely nausea and dizziness can be solved by Continuous outreach in every school about the importance of consuming blood supplement tablets. Optimizing peer counseling. Modify Fe packaging so that it is liked by teenagers. **Ministry of Religion:** Not all prospectus bride have received the BINWIN budget from the center (5000 prospectus bride allocated 750) can be solved by Fulfillment of the binwin budget for all prospectus bride. A policy was made that all prospectus bride for health checks were carried out at the Community Health Center. Binwin should not only be an appeal but an obligation for all prospectus bride. Binwin implementation can be carried out online (for those who cannot leave work). Prospectus bride registration rules between BKKBN and the Ministry of Religion must be the same. **BKKBN:** prospectus bride registration times, prospectus bride health checks not all can access it suggestion for solution ELSIMIL Socialization.

Regional Ministry of Education: Not all junior/high schools have collaborated with higher degree Institution in the context of health education (adolescent reproduction) or pre-marital health. There is no budget for UKS. There are no special staff who handle UKS (duplicated by teachers). There has been no use of the results of research and community service to develop appropriate educational models for teenagers and young people. There is no education for pre-marital preparation in the form of reproductive health services and curriculum in course integration. Suggestion: Health material in the UKS program is standardized (for example about reproductive health, etc.) and included in the curriculum. There needs to be coordination between agencies<sup>10,17,19,24,28,38,39,42</sup>.

#### Recommendations For Program Improvements

At this stage, recommendations for flow programs, service standards and documentation of inspection results are prepared.

Based on the data obtained in stages 1 and 2, we have compiled several things that are taken into consideration in making policy recommendations as follows:

1. Collaboration between schools and universities is needed for adolescent health education activities and optimizing UKS.
2. There needs to be a collaborative activity between schools and community health centers to provide blood supplement tablets.
3. There needs to be an SOP for the flow of administering Fe Tablets from the beginning to the evaluation stage
4. There needs to be a flow of procurement of TTD drugs for all state and private middle and high schools, including distribution.
5. To reduce the number of teenagers who do not want to consume FE tablets, a modification of Fe tablets has been made in the current form which is being attempted by the Center.
6. There needs to be strengthening from the Ministry of Religion regarding the lack of cooperation programs for students with the Education Department
7. Cooperation is needed at the KUA level with education levels that are below the Ministry of Religion only.
8. KUA Collaborates with Community Health Centers in BINWIN activities (joint scheduling)
9. Joint central policy regarding the format for health examinations, health workers and institutions authorized to make prospectus bride health recommendation letters and SOPs.
10. Utilization of research and community service to develop appropriate educational models for cats and teenagers.
11. Utilization of digital-based two-way communication access that can be utilized by the health department, ministry of religion, education department and BKKBN to attract many young targets

#### Conclusions And Recommendations

This research provides recommendations for the need for collaboration between schools and universities for health education, schools and community health centers in providing blood supplement tablets, the need for an SOP for administration flow and procurement flow for Fe tablets as well as evaluation and monitoring. Modifying Fe tablets to make them popular with teenagers, creating health check formats for

use, utilizing research and community service results and utilizing digital-based communications.

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