

Collaboration of Pentahelix in Community-Based Stunting Prevention Program in Tembelang District

Sephia Nurlista Putri¹, Susi Hardjati¹

¹Universitas Pembangunan Nasional "Veteran" Jawa Timur, Indonesia

Email: nurlista06putri@gmail.com

Abstract. *This article analyzes the policies implemented by the Tembelang Health Center to reduce stunting cases in Tembelang District, Jombang Regency. Through the analysis, it was found that the efforts implemented were by forming a Penta Helix collaboration involving five actors including academics, business, community, government, and media which were implemented in the "Beli Emas di Tembelang" program innovation policy. The purpose of this study was to analyze and describe how the Pentahelix collaboration policy reduced stunting in Tembelang District. The research method used was a qualitative method with a descriptive research type, data collection techniques through observation, interview, and documentation techniques. Based on the results of the study, it was found that the five Pentahelix actors involved in the collaboration had carried out their roles according to their respective fields. The implementation of the collaboration was considered to have been carried out well as evidenced by the implementation of the "Beli Emas di Tembelang" program policy having reduced stunting to 3.82% in 2024. The success of the program policy is certainly inseparable from the role and contribution of stakeholders in the Pentahelix collaboration.*

Keywords: *Collaboration, Pentahelix, Stunting, Inovation, Program*

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INTRODUCTION

Stunting in the concept of sustainable development is included in one of the targets of the Sustainable Development Goals (SDGs) which is a form of sustainable development goal number two, namely by eliminating hunger and all forms of malnutrition by 2030 and to achieve food security (Al et al., 2024). Some of the targets that have been set, one of which is to reduce the prevalence of stunting by 40% by 2025, these efforts are made to reduce the level of stunting, both in the global and national scope, the reason for carrying out these efforts is that the current stunting problem has a close relationship with the quality of Human Resources (HR) in the future (Sauri et al., 2024; Susanto et al., 2025).

Based on the Indonesian Health Survey (IHS) in 2023, stunting can be interpreted as a condition of failure to grow in children due to chronic malnutrition, especially in children First 1,000 Days of Life (Adriani et al., 2022). According to Nisa (2018) In tackling the problem of stunting in Indonesia itself, it has various policies and regulations in overcoming the problem of stunting or malnutrition. These policies or regulations can be realized in the form of a program run by the Ministry of Health, the Health Office, and within the scope of the District, namely the Puskesmas.

Program innovations created by the government are expected to support the acceleration of stunting reduction in an area affected by stunting priority loci. In reality, the factors that cause stunting are not only health factors. However, socio-economic factors also affect the problem of

stunting, such as poverty, education level, and family income which is said to be quite lacking. Therefore, stunting prevention is not only focused on the health sector. There needs to be cross-sectoral cooperation carried out as a whole so that the reduction in stunting prevalence rates can run optimally (Rusliadi & Aina, 2024).

Based on the guidelines from Presidential Regulation (Perpres) Number 72 of 2021 concerning the Acceleration of Stunting Reduction. In this regulation, it has been explained that the government's commitment to accelerate the reduction in stunting prevalence rates to achieve the target of 14% (percent) by 2024. However, East Java Province notes that there are 20 districts or cities with prevalence above 20%. Meanwhile, 18 other districts or cities are below 20%. According to (Aini & Suryowati, 2022) related to the prevalence rate of stunting toddlers in East Java Province, it shows that Jombang Regency is included in the category of 15 districts or cities in East Java Province whose stunting rates are above average, namely above the target stunting reduction rate towards 2023 which has been set at 17% with 9 sub-districts that have been designated as priority loci for stunting reduction.

One of the priority areas for stunting reduction is Tembelang sub-district. Based on the data on the achievement of the Tembelang Health Center's stunting target, it was explained that of the total number of toddlers of 1,702 children, those positively identified as stunted reached 53 old cases and 144 new cases in 2024, so that the total number of positive toddlers identified as stunted was 197 stunted children in Tembelang District (Siregar, 2021). Seeing the problem of high stunting cases, the Tembelang sub-district government continues to make efforts to make policies in reducing the stunting rate in the Tembelang sub-district area, efforts made to overcome the problem of malnutrition are not only the authority of government elements, but support by several other actors or cross-sectors is needed (Kennedy et al., 2016).

In relation to the problem of stunting, the commitment of cooperation with several parties between stakeholders is very necessary to be implemented. Through a collaborative approach, it will be able to solve every problem by bridging across sectors, so not only from the government sector. Through this collaboration, it is hoped that the common goals that have been set can be achieved and realized together according to the target (Awaluddin & Sule, 2016). Puskesmas Tembelang as a health institution in Tembelang District created a program innovation policy contained in the Decree of the Head of Puskesmas Tembelang Number: 188.4/29/415.17.11/2023 based on this decision, the "Beli Emas di Tembelang" program innovation was made or stands for Together Care for Stunting Elimination in Tembelang.

The "Beli Emas di Tembelang" program policy was created as an effort to reduce the stunting prevalence rate by increasing communication, coordination, cooperation and advocacy integrated with cross-programs to build synergies as outlined in the Pentahelix model collaboration. The collaboration is intended to unite the common perception, commitment and support of all parties involved in efforts to accelerate the reduction of stunting in Tembelang District.

The pentahelix model is a term used to refer to participation and cooperation between five elements, namely government, business, academia, community and media (Krisnanik et al., 2021). The pentahelix model is an evolution of the previous models, namely the Triple Helix and Quadruple Helix, by embracing various elements from the community, government, and other non-governmental institutions. Through cooperation between these various parties, it is hoped that the government's goal of reducing stunting rates in Tembelang Subdistrict can be achieved.

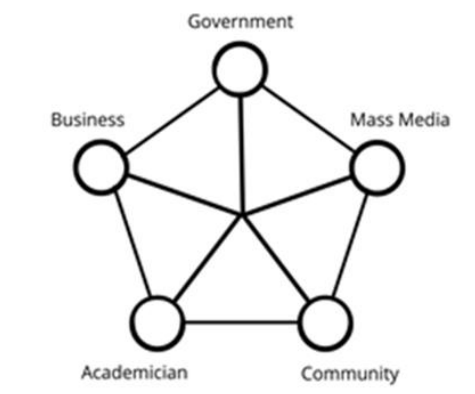


Figure 1. Pentahelix Model

Source: (Sudiana et al., 2020)

According to Rosyadi et al. (2020) and Pedersen et al. (2021) explains that this pentahelix model is suitable for solving problems by involving various parties where stakeholders in the cross-sector are involved representing one location. The five parties involved in the Collaboration work together in an effort to reduce stunting rates through the roles and duties of each stakeholder (Afandi et al., 2022). By seeing that the problem of stunting in Tembelang Subdistrict is still a major problem that must be overcome in order to create success in sustainable development in the future (Mutiarawati & Sudarmo, 2021). and referring to the background of the problems described above, researchers are interested in conducting more in-depth research on the discussion that will be raised by researchers in analyzing how Pentahelix collaboration is implemented for the purpose of reducing stunting rates in Tembelang Subdistrict.

METHODS

This research uses a descriptive qualitative approach to be able to analyze and describe the implementation of the Pentahelix model collaboration as an effort to reduce stunting rates in the sub-district through the "Beli Emas di Tembelang" program policy, Jombang Regency. The Pentahelix theory used to analyze and describe this research is from (Sudiana et al., 2020) which consists of five research focuses including the five actors involved in the Penta Helix model collaboration, including academics, business, community, government, and media. Data collection techniques in this study used non-participatory observation by conducting direct research at the research locus, interviews were conducted involving the Tembelang Health Center as a key informant and other informants including STIKes Husada, PT Phalosari Unggul Jaya, Posyandu Officers and Muslimat Agama Nahdlatul Ulama, and media journalists namely Warga Jombang and Berita Jatim. The last data collection technique is documentation. Data sources in this research include primary data obtained through observation, interviews, and documentation directly on the research subject. While the secondary data of this research is obtained through other literature sources such as news, journals, books, and other sources used to support primary data. This study uses data analysis techniques according to Sibarani et al. (2021), which include four components of data analysis, namely Data Collection, Data Condensation, Data Presentation, and Conclusion Drawing or Verification. The data validity techniques used in this study are triangulation of sources, techniques, and time.

RESULTS AND DISCUSSION

Stunting is a growth and development disorder that occurs in children or toddlers. When viewed in general, children who suffer from stunting will look commensurate and the same, but when compared to children their age, children who are identified as stunted will look shorter than (Crookston et al., 2010). Toddlers who are identified as stunted will also affect their intelligence level which will decrease, impaired speech, and difficulty in learning while at school, besides that their immunity is also susceptible to being easily infected with viruses and bacteria (Pebriandi et al., 2023). Tembelang sub-district as a priority area for stunting reduction in

Jombang district is an area that has high positive stunting cases, with the number of positive stunting identified totaling 15.5% in 2021. With the area included in the priority locus for stunting reduction, the Tembelang sub-district government continues to strive to overcome the problem of high stunting cases in the Tembelang sub-district area. Efforts made by the Tembelang sub-district government that are trying to overcome one of them is the Tembelang Health Center as the government is tasked with overcoming problems in the health sector.

The concept of Pentahelix Model Collaboration according to (Sudiana et al., 2020) is a collaboration or cooperation involving five cross-sector actors in it. In explaining this research based on the research focus and problem formulation that has been determined previously, where the author determines that the purpose of this research is to find out and describe the collaboration of the penta helix model in the innovation of the "Beli Emas di Tembelang" program in an effort to reduce stunting rates in Tembelang District. Based on the focus that the researchers chose related to the Pentahelix Collaboration Model according to (Sudiana et al., 2020), it explains that there are 5 (five) actors involved in the Pentahelix collaboration, including academics, business, community, government and media, the five actors are also known as (ABCGM). The form of important roles and coordination between actors in the collaboration of the Pentahelix model to reduce the prevalence of stunting in Tembelang District is very much needed, the following is a description of the roles of the five actors in the Pentahelix model, namely:

Academics

Academics in the pentahelix model collaboration theory according to Awaluddin et al. (2016) play the role of conceptors, in this case the conceptor is an actor involved in a collaboration that provides a role in developing a concept in the implementation of activities. The concept provided is equipped with knowledge sources from academics involved in this case academics, namely universities that will play a role in channeling their knowledge sources. In this collaboration, academics can help the government or stakeholders involved in creating relevant ideas and theories in creating an innovative program to realize common goals. In the pentahelix model collaboration through the innovation policy of the "Buy Gold in Tembelang" program in Jombang Regency, the academic actors involved are universities. The Higher Education Actors involved are the Coordinator of Study Programs, Lecturers, and Students of the Nutrition Study Program from the Husada College of Health Sciences (STIKes) Jombang Regency.

STIKes Husada Jombang participates in the Pentahelix commitment to support stunting prevention efforts through the innovative program "Buy Gold in Tembelang" by signing a cooperation agreement related to stunting prevention efforts in the Tembelang Community Health Center work area. Based on the cooperation agreement stated in the Decree (SK) of the Tembelang Community Health Center through the "Buy Gold in Tembelang" Innovation Program Number: 188.4 / 29 / 415.17.11 / 2023, it is explained that the academic element, namely STIKes Husada Jombang, plays a role in developing the latest scientific resources that are relevant to stunting conditions in the field and providing assistance to predetermined stunting targets. Meanwhile, in line with the previously established collaboration between the Tembelang Community Health Center and STIKes Husada Jombang, the intent and purpose of the collaboration agreement is outlined, namely in the first point, the purpose of the collaboration is in the field of health services and the implementation of the Tri Dharma of Higher Education in an effort to achieve health standards at the Tembelang Community Health Center. The central area, the second point with the aim of accelerating the reduction of stunting rates in the Tembelang Community Health Center work area, involving a team of lecturers and students from STIKes Husada Jombang.

Based on the results of the research interviews, it was found that the role given by STIKes Husada Jombang in the program is to provide education and socialization to stunting targets and pregnant women in the Tembelang Community Health Center work area. The delivery of education is given through direct explanation media by students or by using leaflets as supporting media. The provision of education has been implemented in 2023 with 3 target villages in

Tembelang District, namely Mojokrapak Village, Tembelang Village, and Sentul Village. Meanwhile, in 2024, education was provided to 2 villages, namely Mojokrapak Village and Tembelang Village. The provision of stunting education is not provided to all villages in Tembelang District, but to villages in the Tembelang Community Health Center work area that have been designated as priority loci of high stunting cases.

In its contribution, STIKes Husada Jombang also plays a role in the form of practical training on Clean and Healthy Living Behavior conducted by a team of students and accompanied by a team of lecturers from STIKes Husada Jombang. The PHBS training was given to mothers who are Posyandu cadres, stunting target companions, namely parents, and to stunting targets directly, namely toddlers. The PHBS practice itself is a health education step by teaching about clean living and healthy lifestyles from an early age. In its implementation, the targets are taught how to wash their hands properly before eating and introduce nutritious foods and good vitamin intake. Another role is to provide assistance to families of pregnant women in the Tembelang District area according to data on pregnant women who are at risk of giving birth to stunted babies. For this reason, STIKes Husada Jombang provides assistance to pregnant women during the First 1000 Days of Life by providing education on knowledge related to nutrition and vitamins needed during that period and conducting examinations accompanied by the Tembelang Health Center to determine the progress of reducing the risk of stunting in children.

In its implementation, the community was well-received, resulting in a decrease in stunting rates. It can be concluded that the collaboration has successfully had a positive impact on the Tembelang District community. This success is also supported by the collaboration of all parties in implementing their roles, so that educational activities can be carried out optimally. In the continuation of this collaboration, it is hoped that academics, namely STIKes Husada Jombang, can add and create new innovative conceptual ideas in stunting prevention efforts, such as developing a simple nutrition education module to improve family nutritional literacy. This module can be integrated into integrated health service post (Posyandu), school activities, or health cadre training, considering the importance of education in forming healthy, nutrition-conscious behaviors.

These collaborative efforts have gradually yielded tangible results, marked by a consistent decline in stunting rates in Tembelang District. This reflects the success of collaboration between academics and the government to the community in addressing public health issues. Based on the results of research and interviews that have been conducted, it can be concluded that there has been a collaboration between STIKes Husada Jombang and the Tembelang Community Health Center. Based on the results of the study, STIKes Husada Jombang in providing educational roles or concepts to stunting targets in Tembelang District, STIKes Husada Jombang in its implementation is always accompanied and assisted by the Tembelang Community Health Center team. Therefore, it can be concluded that the successful implementation of the program cannot be separated from the collaboration between STIKes Husada Jombang and the Tembelang Community Health Center in an effort to reduce and prevent stunting in the Tembelang District area.

Business

The role of business is as an enabler. In the business world, an enabler is a form of support from a business partner for their contribution to collaboration through activities or programs to achieve shared goals. In this case, an enabler means a business collaborating by providing support for programs running within its area of expertise. Meanwhile, according to (DD Astuti et al., 2020), The business sector, in implementing this pentahelix collaboration, also plays a role by providing support in the form of Corporate Social Responsibility (CSR). This aligns with research (Sudiana et al., 2020). which states that the role of support provided by the business world is in the form of implementing Social Responsibility or manifested in the form of Corporate Social Responsibility (CSR) from the business world involved by providing funding support, assistance, and provision of facilities to affected communities.

Gold in Tembelang" program policy, the business actor involved is PT. Phalosari Unggul Jaya. As a business entity, PT. Phalosari Unggul Jaya is a national private company engaged in the poultry sector, producing live broiler chickens for internal rearing (Own Farm-Closed House) and Chicken Slaughterhouse (RPA). Based on a cooperation agreement between PT. Phalosari Unggul Jaya and the Tembelang Community Health Center, it was found that the purpose of the cooperation agreement was related to The role played by PT. Phalosari Unggul Jaya in efforts to reduce stunting rates includes increasing the provision of education to toddler posyandu cadres with growth and development care activities, increasing the provision of education to the community through the making video complementary foods for breast milk and the creation of podcasts on stunting issues, mentoring families of pregnant women at risk of giving birth to stunted babies, and providing support in the form of providing high-protein food ingredients to the targets of assistance in the innovative program activity "Buy Gold in Tembelang" (Caring Together to Eliminate Stunting in Tembelang).

This study found that the private sector's role in this collaboration was to provide financial support in the form of nutritious and high-protein food, which was distributed directly by the President Director of PT Phalosari Unggul Jaya. The support provided by PT Phalosari Unggul Jaya to the Tembelang District community included providing additional nutrition in the form of milk, vitamins , zinc, and nutritious, high-protein food in the form of processed chicken according to PT Phalosari Unggul Jaya's production. This assistance was provided to pregnant women who were identified as giving birth to stunted children. This support is expected to help provide additional nutrition for these pregnant women to prevent the birth of stunted children. In addition, PT Phalosari Unggul Jaya also continuously strives to facilitate the implementation of the "Buy Gold in Tembelang" program innovation by providing the financial resources needed for the implementation of the program innovation.

However, in carrying out its role, the business entity did not fully fulfill the roles stated in the MoU, such as providing education to cadres regarding toddler growth and development and conducting joint podcast activities with stunting targets. This was not implemented due to obstacles in the activities that had been implemented. Based on research, it was found that the obstacle faced by the business entity was in providing assistance with examinations for stunted toddlers in several villages in Tembelang District that had been designated as stunting hotspots. There was a lot of resistance from families or pregnant women who refused to have their pregnancies identified as stunted. In addition, another obstacle related to the provision of nutritious food assistance that was not properly targeted to stunting targets. Certainly, to overcome this problem, the involvement of other actors and outreach to the community regarding the importance of maintaining health and consuming nutritious food. After the education from the actors to the community was finally well received, the business entity, along with other actors, conducted door-to-door visits to the homes of stunted target families. Gradually, the education and the action of providing nutritious food assistance were well received by the stunting target families, allowing the food assistance to be implemented.

Community

Community actors in Pentahelix have a role as accelerators, according to the concept, the accelerator itself is a group of individuals who have common interests and are relevant to the program to be implemented. According to (Supriyanto & Iskandar, 2022) these community actors also play a role in supporting innovation through sources of innovative ideas. The government's efforts in collaborating with the Pentahelix model to accelerate stunting reduction in Tembelang District in the "Buy Gold in Tembelang" program innovation, the community elements involved are Posyandu Cadres and the Tembelang District Religious Fatayat. In this program innovation, community elements provide roles according to their respective duties in efforts to accelerate stunting reduction in Tembelang District, because the two community members who are included in the Pentahelix collaboration come from different scopes so that the delivery of their roles to the community or stunting targets is also different.

Gold in Tembelang" program, Posyandu cadres play a role in providing examination assistance to the Tembelang Community Health Center during home visits to target stunting locations during the program's innovation activities. Outside of the program, Posyandu cadres also assist the Tembelang Community Health Center in conducting examinations during routine Posyandu activities once a month. Posyandu cadres in Tembelang District divide their members based on the number of Posyandus provided per village in Tembelang District. Thus, each village in Tembelang District has a cadre who assists in Posyandu examinations. Community Health Center. Research shows that the role of cadres in the "Buy Gold in Tembelang" program and routine Posyandu activities is to assist in measuring children's weight and height, recording the results, and reporting them to the Tembelang Community Health Center upon completion. Furthermore, Posyandu cadres provide nutritious food assistance to stunting targets, ensuring additional nutritional intake for them.

Meanwhile, based on the results of research with the Fatayat Agama community in Tembelang District, it was found that the role of Fatayat Agama is to provide education and supplies to its targets, namely teenagers or prospective brides in Tembelang District. For this target, Fatayat Agama provides assistance and education to teenagers, namely prospective brides and grooms who will be getting married. Fatayat Agama carries out its role in the religious field by providing premarital guidance by holding direct meetings with prospective brides and grooms, providing socialization and counseling to teenagers and prospective brides regarding guidance on pre-marriage preparation, providing an understanding of the importance of health in the family, providing an understanding of the importance of healthy pregnancy preparation, and providing an understanding of the importance of Family Planning. In carrying out its role in stunting reduction activities through the innovative program "Buy Gold in Tembelang", the community also faces a number of challenges and obstacles. The challenges for the Posyandu Cadre community, namely related to the lack of understanding regarding parenting patterns from mothers and families, parenting errors are also a factor causing stunting in children. In addition, the lack of awareness of mothers to participate in Posyandu activities so that examinations cannot be carried out comprehensively, this of course has an impact on data collection related to child growth and development. Based on action research, the solution to these problems is to strengthen collaboration by empowering the community to maintain their health. The action taken by the Posyandu cadre team together with the Tembelang Community Health Center is to conduct direct home visits to residents who are not present during Posyandu activities. It is also hoped that the involvement of community actors in the PAC Muslimat NU should not be temporary, but rather be designed systematically and sustainably. Consistent community roles are crucial as extensions in conveying information and providing support to families regarding the importance of adopting healthy lifestyles and preventing stunting.

Government

The government plays a role as a regulator, according to (Supriyanto & Iskandar, 2022). The government, in this case, acts as the authorized party and has regulations and controllers responsible for controlling the implementation of a program or activity. The government is the party that regulates and coordinates all actors, in this case the government is involved in various activities including policy setting, licensing, implementation, monitoring, and control. In the Pentahelix model collaboration in the "Buy Gold in Tembelang" Program Innovation, the government element in this case is the Tembelang Community Health Center. Based on the results of the study, it was found that the efforts made by the Tembelang Community Health Center to accelerate stunting reduction were by issuing a Decree that accommodated Penta Helix model collaboration Number: 188.4/29/415.17.11/2023 related to the "Buy Gold in Tembelang" program innovation. Through the established program, the Tembelang Community Health Center provides the following support:

Monitoring

The Tembelang Community Health Center, as the regulator, is responsible for monitoring and managing the "Buy Gold in Tembelang" program. Monitoring is carried out to ensure that all stakeholders fulfill their respective roles and that all assigned roles are channeled to the Tembelang District community, ensuring that all roles are effectively and effectively distributed.

Education

The Tembelang Community Health Center (Puskesmas) provided education through outreach activities, integrated health service post (Posyandu) mentoring, and stunting meetings at the Tembelang District Office, Jombang Regency. The education was provided when the Tembelang Community Health Center went directly to the field to address maternal issues such as anemia, poor weight gain, and mothers experiencing Chronic Energy Deficiency (CED).

Support for Mothers and Children Affected by Stunting is Provided by Nutrition Officers at the Tembelang Community Health Center

Support for stunted mothers and children includes regular checkups to ensure they are consuming nutritious food and ensuring their weight and height are increasing properly. Support also includes providing additional nutrition in the form of vitamin supplements, iron, zinc, and iodine. Conducting House-to-House Inspection Visits. During these inspection visits, all Pentahelix actors the government, business, academics, communities, and the media directly visited the homes of stunting targets within the "Buy Gold in Tembelang" program. Thus, inspections were not limited to village health posts (Posyandu). They also included individual home inspections of residents with toddlers or pregnant women. This allowed for inspections that could not be reached at Posyandus. Based on the research results above, it was found that the implementation of the "Buy Gold in Tembelang" program innovation has consistently reduced stunting prevalence in the Tembelang District. This was determined based on data provided by the Tembelang Community Health Center (Puskesmas) as a measure of stunting reduction efforts, as described in the following table:

Table 1 Stunting Data 2023-2024

Year	Checked	Stunting	Percent	Target
2023	1461	149	10.2%	14%
2024	1615	93	5.79%	14%

Source: Tembelang Community Health Center Data (2024)

Based on data on the achievements of stunting reduction efforts at the Tembelang Community Health Center, it is explained that after the implementation of the innovative "Buy Gold in Tembelang" program since January 2023, stunting cases in Tembelang District have gradually experienced a consistent decline. This can be explained in the table above, which shows that in 2023, the stunting achievement was 10.2% with 149 positive stunting targets. Meanwhile, in 2024, there was a significant decline with a total of 5.79% with 92 stunting targets. Based on these achievements, it was found that the results were below the national target for reducing stunting rates according to Presidential Regulation No. 72 of 2021, which targets a 14% reduction in stunting in 2024. Therefore, it can be concluded that the stunting reduction achievement rate at the Tembelang Community Health Center has achieved the set target.

To achieve this target, of course, not everything runs smoothly. The Tembelang Community Health Center also faces its own obstacles in providing its role to the stunting target community. In the two years of the program, obstacles in implementing the Tembelang Community Health Center's role were door-to-door check-ups. Based on research results, it was found that these obstacles were related to the check-ups carried out by the Tembelang Community Health Center not all being on time. Due to the busy schedules of stunting target families, the check-ups were not timely and the data collection of toddlers and pregnant women was disrupted. However, all efforts continued to be carried out, starting from the implementation

of direct check-ups to people's homes together with Posyandu cadres, these efforts were continued so that it was hoped that growth and development data would not be missed.

Media

According to (Sudiana et al., 2020) in the Pentahelix theory, the media plays the role of an expender. Meanwhile, according to Linders (2012) the definition of an expender is that the media has a supporting role related to the publication of information on a program or activity carried out during the collaboration to the general public. The role of the media as an expender itself is as a party involved in a commitment to a collaboration that supports the process of program activities through publications poured into online media such as the internet website, Instagram, and Facebook. Meanwhile, based on the Pentahelix collaboration in an effort to accelerate stunting reduction in Tembelang District, Jombang Regency, which was implemented through the innovative program "Buy Gold in Tembelang", the media actors involved were from the East Java News media and the Jombang Citizens media. Both media each provide their roles according to the characteristics of the publications in the media.

Based on the research, it is explained that the role of Berita Jatim as a media element in the "Buy Gold in Tembelang" program is to carry out the publication process by writing web articles on internet platforms. In the publication, the Berita Jatim media explains on the related news media page how the process of activities during the "Buy Gold in Tembelang" program innovation takes place. The delivery of the publication is written in the Berita Jatim web article with the news title "Companies in Jombang Strengthen Collaboration to Prevent Stunting". In the content of the news article, the media emphasizes the provision of additional basic food assistance from the business party, namely PT. Phlaosari Unggul Jaya. Based on the publication in the Berita Jatim media, the media only highlights the provision of additional basic food assistance by the business party, only other parties involved are mentioned.

Based on the results of interviews with Warga Jombang journalists, it was explained that the role given in their involvement as a media element in the "Buy Gold in Tembelang" program innovation was not much different from the publications delivered by Berita Jatim media. Warga Jombang media provided its role in the form of news publications through Warga Jombang's Instagram page and Warga Jombang's YouTube page. The content of the publication delivered by the media was also almost the same as Berita Jatim media, namely discussing business actors in the Pentahelix collaboration who provided nutritious food assistance. The publication was presented in video form with a short interview in the middle and final minutes with the business actor, namely PT Phalosari Unggul Jaya and the government, namely the Nutritionist at the Tembelang Health Center. The video broadcast was titled "Prevent Stunting, Companies in Jombang Help Nutrition for Pregnant Women" with almost the same news content, namely emphasizing the side of business actors who provide nutritional assistance for pregnant women in Tembelang District.

This is not justified in the concept of collaboration, as the pentahelix actually involves five elements (academia, business, government, society, and media) working together synergistically and equally to achieve common goals, rather than favoring one party over another. Favoring one actor indicates bias or an imbalance of interests in the collaboration, which will reduce the effectiveness and sustainability of the pentahelix itself. Based on these findings, it can be concluded that there are shortcomings, namely related to communication between actors. Therefore, the news presented regarding the publication of the "Buy Gold in Tembelang" program should be able to include all collaborating actors by highlighting the innovation of the "Buy Gold in Tembelang" program which is implemented in accordance with the objectives of the collaboration, namely related to efforts to reduce stunting in Tembelang District with cross-sector actors involved. For the sustainability of the collaboration, communication between Pentahelix actors should be further improved so that the role of each actor can be carried out optimally.

CONCLUSION

Based on the discussion above, it can be concluded that the performance measurement of pentahelix actors in the Buy Gold program in Tembelang shows that the government, through community health centers (Puskesmas), has the highest performance because it acts as the initiator, manager, and main implementer of the program. The business world or business parties are in second place with significant contributions in the form of financial support and gold incentives, which are the main drivers of community participation. The community or society is in third place because it plays a direct role in the field through Posyandu cadres and toddler families. Academics are in fourth place with a crucial role in providing conceptual input, innovation, and research-based evaluation. Meanwhile, the media is in last place because its role is more in publication and dissemination of supporting information. Thus, although their performance varies, all actors complement each other in supporting the success of the stunting reduction program in Tembelang District.

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