

Government Collaboration in Combating Schistosomiasis in Bada

M. Nur Alamsyah¹, Muhammad Nawawi², Sisrilnardi³

Universitas Tadulako, Indonesia

E-mail: mnuralamsyahsip@gmail.com

Abstract

Schistosomiasis is an endemic disease in Indonesia which is only found in the province of Central Sulawesi, namely in Poso and Sigi Regencies. The area where the distribution of schistosomes was found was in Kab. Poso in three places namely Bada, Lore and Napu. Although the policy for handling schistosomiasis snails and the impact of the disease has been handled since the colonial era, the Indonesian government has only taken serious action since 1982, which has not been completed until now. The absence of a common view on the problem of schistosomiasis has resulted in an asynchronous implementation of programs and activities related to the alleviation of schistosomiasis. This primary data collection technique also uses secondary data that comes from the Poso health office, the Bada schistosomiasis laboratory and the implementation of triangulation of actors, methods and data through focus group discussions which are expected to be able to map out the issues of involvement and the similarity of viewing problems in the management of schistosomiasis control in the context of the study. This takes the area of Bada which is relatively successful although not yet complete. The collaboration model by collaborating with various internal institutional elements of the local government in each related regional apparatus organization, involving the community as an important part by becoming stool collectors, the presence of teachers and priests who provide strengthening information regarding the urgency of participation and collaboration to solve schistosomiasis has a broad impact on program achievements this.

Keywords Policy, Collaboration, Village Government, Pentahelix, Schistosomiasis

INTRODUCTION

Collaboration is often used to describe the process of completing work that is cross-border, cross-sectoral, cross-relationship (O'Leary et al., 2010). In fact, this concept can be explained across organizations and even across countries. The term collaboration contains a very general and broad meaning that describes the existence of situations and conditions regarding the occurrence of cooperation between two or more people or institutions who understand each other's problems together and try to help each other solve each other's problems together too. The main framework in a collaboration is the existence of awareness and opportunities regarding the problems faced and then understanding the urgency of the involvement of other groups to achieve their goals (Newman et al., 2004).

One of the main implications arising from collaboration is bringing togetherness in facing various problems, various risks, meeting resource needs, as well as the responsibilities and rewards expected by each member of the group. This concept is very much in line with the basic essence of democracy which is used as the main framework for implementing democracy.

The essence of democratic government places elements of society as one of the main elements in achieving the goals to be achieved by the state and government (Mote, 2020). Policy is often interpreted as a number of decisions made by those who are responsible in certain policy areas, this of course places interactions between various marginalized



interests. One element of achieving the goals of good governance is government that is managed by taking into account the involvement of elements of society, government/state and the private sector in it (Engdaw, 2021). This context places the definition of policy by Thomas R. Dye (Sema Ardianto and Widayati,

The implementation of government policy is the embodiment or implementation of an ideal that becomes a constitutional mandate which is outlined in the form of a program, activity, action or action in a mechanism that is bound to a model related to other elements. The publication of public policy programs is certainly based on the need to resolve problems that occur in society. Public policy is determined by the parties (stakeholders), especially the government, which is oriented towards fulfilling the needs and interests of the community. Health in the constitutional mandate is an essence that becomes the right of the community to be fulfilled as stated in the General Declaration of Human Rights which is stated as a basic right.

Schistosomiasis in Indonesia is only found in the Bada, Napu and Lindu Valleys which have been found since 1937 in Lindu, 1974 in Napu and 2008 in Bada. Of course the bada phenomenon became an interesting thing considering that there have been handling practices in the other two regions which should make it easier to handle them. Policies for handling this disease nationally were then set as a national priority to be eradicated in 2019. Schistosomiasis has attacked humans which has had an impact on the economy and health and even the social life of the people in the region. One of the real impacts is stunting and low enthusiasm for learning in children. (Bappenas, 2017).

Policies that have existed so far at various levels of government are of course an attempt to resolve the prevalence rate through a mechanism of cooperation between government institutions. It's a shame that no serious efforts have been made systematically and massively to make the problem of schistosomiasis, which is one of the endemic and unique diseases in Central Sulawesi, seems to have not experienced a shift in achievements. There is no comprehensive evaluation of the actors, content, context and processes that interact with this issue.

It is hoped that this study will be able to map how the conditions are in a policy triangle related to schistosomiasis, working to eradicate it. The studies conducted so far have only tried to explain the importance of inter-agency work and participation in achieving the 0% prevalence target. This study will look more broadly at 4 arenas which are obstacles and challenges related to the implementation of this policy.

This study will review how management interaction models can be selected in alleviating schistosomiasis by involving various stakeholders. Interaction between various stakeholders regarding how government institutions, private businesses, community communities, campuses and the media can actively and intensely interact to synergize in the schistosomiasis eradication agenda in Bada. This is related to how the model determines collaboration, and formulation, institutionalization in order to be able to achieve maximum schistosomiasis management in the Bada region. This study conducted the preparation of a governance model for tackling schistosomiasis with the pentahelix model to be able to build

interaction system outcomes as an effective, efficient and sustainable model in the treatment of schistosomiasis.

This study, although in a limited area, namely only 1 region, namely Bada of 3 regions which are the locations of schistosomiasis in Central Sulawesi, namely Napu and Lindu, the results of this study will be the basis for evaluating schistosomiasis control policies in these two different places. This research will be utilized by the government to optimize planning for schistosomiasis prevention by compiling a basic framework for revitalizing policies and reviewing existing policies in order to provide more optimal synergy and policy outcomes.

LITERATUR REVIEW

Good governance requires a synergistic relationship between institutional actors, both the government, the community and the private sector. The settlement of various affairs faced by the community is not necessarily widely understood by the government. In the concept of democracy, the people are the ones who best understand what is best and what must be done to be able to achieve what they expect. On the other hand, private persons who have supporting potential that can create conditions that are conducive to business in general will be able to contribute according to their capacity. This is because not only one or two elements are needed, but also the network that runs it. Collaboration that involves the government through community participation and other sectors, especially the private sector,

Collaborative activities in certain ways and processes that will later produce policy products that are in accordance with the needs of the public or society. This concept emphasizes that in administering government, public actors, namely the government and private actors, namely business organizations or companies and the public, are not separate entities and work individually but work together for the benefit of society.

Another view of collaborative governance comes from Agranoff and McGuire (Ansell & Torfing, 2015) which states the following: In Particular, collaborative governance has put much emphasis on voluntary collaboration and horizontal relationships among multi sectoral participants, since demands from clients often transcend the capacity and the role of a single public organization and require interaction among a wide range of organizations that are linked and engage in public activities. Collaboration is necessary to enable governance to be structured so as to effectively meet the increasing demands that arise from managing across governmental, organizational, and sectoral boundaries. (In particular, collaborative governance has placed a great deal of emphasis on voluntary collaboration and horizontal linkages among various multi-sectoral participants, as demands from clients often go beyond the capacity and role of a single public organization and require interaction among multiple organizations involved in and involved in public activities. Collaboration is needed to enable governance to be structured so as to effectively meet the increasing demands arising from managing across governmental, organizational, and sectoral boundaries).

The pentahelix model approach is one of the innovations for developing business and social opportunities (Tonkovic et al., 2015). The existence of the potential of an area with the existence of problems that hinder program achievements such as the schistosomiasis icon which is the image of the bada valley can be extended with the pentahelix model (Effendi et



al., 2016). This situation will more or less give a stigma that is not supportive for the community, government and business actors so that it hinders various efforts to be able to gain development progress. In its true condition, through a multi-stakeholder collaboration model that involves the world of academia, both universities/academicians as a supporting element and the involvement of the mass media, will be able to build a culture of innovation. Such a model will also be able to seek, identify and detail strategies and programs that can be implemented in the future. The existence of this model will be able to provide reinforcement of various opportunities, especially in strengthening resources, knowledge and technology to achieve development goals and progress to be achieved (Sudiana et al., 2020).

According to the view of the concept In this Pentahelix, the Government cannot stand alone to be able to advance opportunities for progress, especially economic and social. Governments not only find themselves in new relationships with fellow governments at other levels which in this context are sub-districts, districts/cities, provinces and even the center through ministries, but more often on a wider spectrum of public and private organizations as well, communities and the media as well as the world of academia. For this reason, the formation of various related matters that will be achieved by local governments requires collaboration and adaptive managerial capabilities to be able to work optimally alongside the government and bureaucratic processes - as usual, bringing strategies that are produced locally.

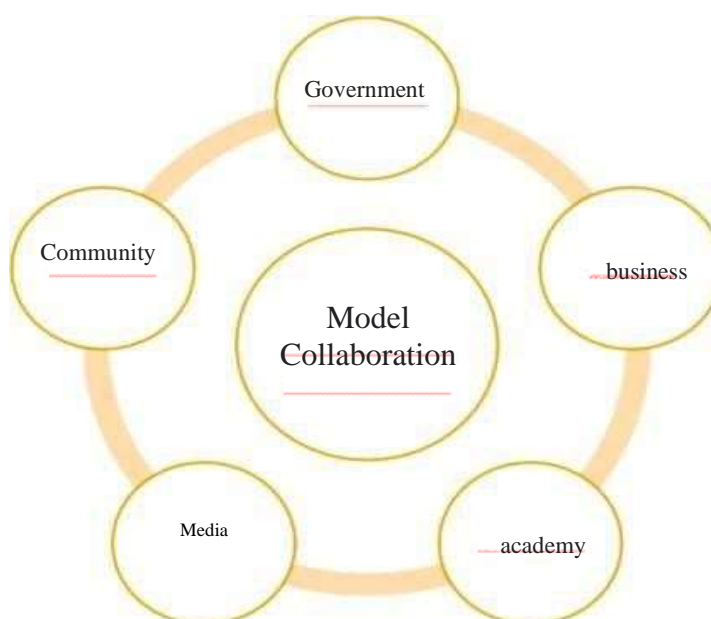


Figure 1. Pentahelix model

Occurs between Regional Governments through OPD involved with Non-Governmental Organizations Society in efforts to prevent HIV-AIDS disease is still not running well. This is because there are results of direct discussion dimensions that have not gone well, dimensions of building trust that have not been formed properly, dimensions of commitment to the collaboration process that have been well formed, dimensions of shared

understanding that are not well formed, and dimensions of interim results of collaboration that have not been formed well.

The existence of collaborative governance is not something that suddenly appears in the management of government management. Collaborative governance is caused by the existence of initiatives from various parties that encourage partnerships and cooperation and coordination that are mutually supportive and beneficial in solving problems being faced by the public. Collaborative Governance or collaborative governance emerged as a response to implementation failures and high costs and the politicization of regulations (Ansell & Torfing, 2015). In general, as stated above, the concept of collaborative governance is constructed by the existence of institutions, networks and social organizations. Deep organization the notion of governance here is part of a network that involves many stakeholders to realize collective goals. The interaction between various organizational work systems is the process of the exchange of resources between organizations. The decision chosen is the result of a negotiation process between organizational and institutional actors that emphasizes relational sustainability. Collaboration in fact requires a balance of power relations in order to avoid the centralization of authority which is usually centered on the government. The value referred to in collaboration in the form of the diversity of resources of each organization will create interdependence between organizations in achieving collective goals. Collaboration in fact requires a balance of power relations in order to avoid the centralization of authority which is usually centered on the government. The value referred to in collaboration in the form of the diversity of resources of each organization will create interdependence between organizations in achieving collective goals. Collaboration in fact requires a balance of power relations in order to avoid the centralization of authority which is usually centered on the government. The value referred to in collaboration in the form of the diversity of resources of each organization will create interdependence between organizations in achieving collective goals.

This relates to the assessment of the level of efficiency of a program. An efficient program is a program that is able to provide adequate results or benefits in terms of the costs and benefits of the program. The size for this concern is tangible and intangible; monetarizable versus non-monetary and direct versus indirect cost benefits. Political viability, policies built in the political arena must therefore get enough support from the political process. As a consequence, alternative policy models should focus on political values/judgments. Political size in this case relates to the support of policies by decision makers, public officials, the public and other sources of power in the political process. The existence of decentralization has brought changes regarding the authority to carry out various things that are needed by local communities at the level of Poso Regency and Central Sulawesi Province. This study will be able to position the policy conditions and the resulting implications for these policies related to schistosomiasis.

Health phenomena that are implemented in policies as a series of government action relations that are determined through a network of interconnected decisions require the involvement of other stakeholders. Health policy also forms a strategy/approach to influence determinants in the health sector in relation to strategic issues in order to improve the quality



of public health, in this case related to schistosomiasis. Therefore, the meaning of Health policy is essentially an arrangement of design objectives and basic considerations for government programs related to public health problems related to schistosomiasis in the context of this research as the government's choice to do or not to do in the field of public health.

Policy studies on schistosomiasis conducted by (Ahmad Erlan et al, 2012, 2014) suggested that there was a policy by the Governor of Central Sulawesi through the Integrated Schistosomiasis Control Team although it was argued that there was a need for regional regulations as an umbrella for synchronizing the work of all SKPD. This study does not place the working relationship between the central, provincial and district governments as a unit in the context of national policy. Another condition seen in another study (Firmansyah, 2017) is that the implementation of policies regarding integrated teams controlling Schistosomiasis needs to be reviewed and re-socialized so that the performance of integrated team members can be more integrated and coordinated so that the goal of reducing the prevalence of Schistosomiasis below 1% can be achieved. Another study conducted by (Pasinringi et al., 2021) argued that the achievement of solving schistosomiasis could be carried out better in the Bada region due to good leadership resulting from a process of ranking positions and which was the result of a management pattern established by the state. PIM 2, which is a vessel for the candradimuka crater for echelon 2 officials in the regions, is a strategic space that can give birth to new innovations for bureaucratic leaders of regional organizations.



Another study related to the involvement of community participation was put forward in a study (Pitriani, Muh. Jusman Rau, 2017) which through the use of the focus group discussion method found that there was an idea to form Schistosomiasis cadres at the RT level in endemic villages and potentially endemic. It is hoped that this will further encourage community participation so that the scope of routine fecal examinations can be achieved, people want to wear boots and use clean, safe water.

The results of this study are supported by a thesis study (Khairil Akbar, 2016) in which a study of schistosomiasis in relation to community behavior found multiple variables in four indicators of the incidence of schistosomiasis consisting of using water sources, passing

through focus areas, using personal protective equipment and activity habits in rivers/ditches. . This quantitative study found that a predictive index for schistosomiasis events based on community behavior was obtained in addition to poor use of water sources, habit of doing activities in rivers/gullies, passing through focus areas and use of personal protective equipment (not using).

The results of the study found by Fitriani and Hairil Akbar are in line with studies conducted by (Ningsi and Ikhtiar Hatta, 2017; Dedi Mahyudin Syam, Andi Bungawati, Elvyrah Faisal, 2018) which concluded that Lindu residents' knowledge regarding schistosomiasis is quite good , but preventive behavior to protect yourself and your family is very much less done. The habit of people who do not use personal protective equipment while in the fields and gardens allows the transmission of schistosomiasis to continue. Other studies also suggest that the technical dimensions for cases of using water facilities and using family training are not related to the incidence of schistosomiasis. There is a significant relationship between the use of PPE and the role of cadres with the incidence of Schistosomiasis. The study (Ni Nyoman Veridiana, Sitti Chadijah, 2013) found research results showing that the people in Mekarsari Village and Dodolo Village mostly had behaviors that were lacking in preventing the transmission of schistosomiasis. Of the three factors studied, what is related to people's behavior in preventing the transmission of schistosomiasis is work.

Another study related to the involvement of community participation was put forward in a study (Pitriani, Muh. Jusman Rau, 2017) which through the use of the focus group discussion method found that there was an idea to form Schistosomiasis cadres at the RT level in endemic villages and potentially endemic. It is hoped that this will further encourage community participation so that the scope of routine fecal examinations can be achieved, people want to wear boots and use clean, safe water.

The results of this study are supported by a thesis study (Khairil Akbar, 2016) in which a study of schistosomiasis in relation to community behavior found multiple variables in four indicators of the incidence of schistosomiasis consisting of using water sources, passing through focus areas, using personal protective equipment and activity habits in rivers/ditches. This quantitative study found that a predictive index for schistosomiasis events based on community behavior was obtained in addition to poor use of water sources, habit of doing activities in rivers/gullies, passing through focus areas and use of personal protective equipment (not using). The results of the study found by Fitriani and Hairil Akbar are in line with studies conducted by (Ningsi and Ikhtiar Hatta, 2017; Dedi Mahyudin Syam, Andi Bungawati, Elvyrah Faisal, 2018) which concluded that Lindu residents' knowledge regarding schistosomiasis is quite good, but preventive behavior to protect yourself and your family is very much less done. The habit of people who do not use personal protective equipment while in the fields and gardens allows the transmission of schistosomiasis to continue. Other studies also suggest that the technical dimensions for cases of using water facilities and using family training are not related to the incidence of schistosomiasis. There is a significant relationship between the use of PPE and the role of cadres with the incidence of Schistosomiasis. The study (Ni Nyoman Veridiana, Sitti Chadijah, 2013) found research



results which showed that most of the people in Mekarsari Village and Dodolo Village had behaviors that were lacking in preventing the transmission of schistosomiasis. Of the three factors studied, what is related to people's behavior in preventing the transmission of schistosomiasis is work.

METHODS

This research approach is descriptive qualitative. This approach emphasizes the meaning, reasoning, and definition of a particular situation in the context of forming a schistosomiasis alleviation model. The use of this method will examine more matters related to everyday life faced by the problem of schistosomiasis in implementation. The descriptive research method is one of the research methods that is widely used in research that aims to explain an event, namely the stages of formulation, implementation and evaluation, especially the effectiveness of policy outcomes regarding the involvement of various institutions in tackling schistosomiasis. This study used elite interviewing as stated (Patton and Sawicki, in), with the referent method or snowball sampling to select selected key informants who are information-rich or information-rich key informants.

This policy research was conducted with reference to the following principles: multidimensional, empirical-inductive, practical action-oriented, actor-based, and value-laden policies. This study uses data collection techniques both secondary and primary with in-depth interview techniques, triangulation. Use of Interview techniques In-depth analysis is used as a process of obtaining information for research purposes by face-to-face debriefing between the questioner or interviewer and the answerer or informant using a tool called an interview guide. Another instrument used is a recorder (recording). The data analysis used in this study follows the concept given by Miles and Huberman, Saldana (2014). revealed that the activities in qualitative data analysis were carried out interactively and took place continuously at each stage of the research so that it was complete. Components in data analysis: 1. Data reduction. It is a selection process, focusing attention on simplifying, abstracting, and transforming raw data that emerges from written records in the field. Where after the researcher has obtained the policy data, this method emphasizes the need to first examine its feasibility by selecting which data is really needed in this research 2. Data Presentation Presentation of data is limited as a set of arranged information that is adjusted and clarified to make it easier for researchers and mastering the data and not being immersed in a pile of data 3.

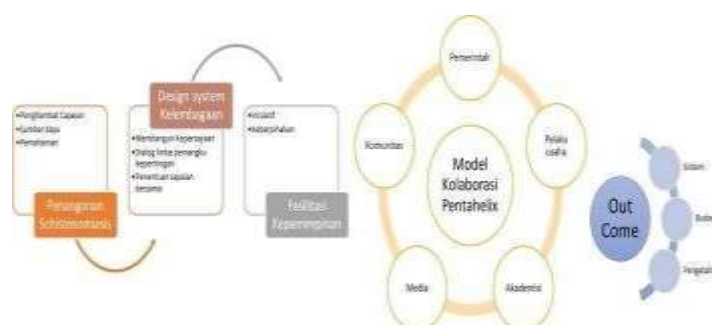


Figure 3. The flow of the Schistosomiasis

RESULTS AND DISCUSSION

Overview of Management of Bada Valley Schistosomiasis Management

The research locations are in four villages in West Lore District, namely Tuare Village, Kageroa Village, Tomehipi Village, and Lengkeka Village. The selection of these villages as research locations, aside from being areas that have the most focus on snails, is also based on aspects of policy management to eradicate snail fever in accordance with the government's roadmap 2018-2025 years. Field study stages by collecting primary data by conducting interviews with sources such as; Village Government, Members of the Poso Regency DPRD, Religious Leaders, Traditional Leaders, Chair of TIMPEDA.

Geographically, West Lore District has an area of 331.36 km², with a population of 3,188 people. In terms of modern government administration, the West Lore Sub-District is divided into six (6) villages where Lengkeka Village has the largest population, namely 949 people, while the smallest population is Tomehipi Village, namely 346 people.



Figure 4. Focus Distribution of Schistosomiasis

Source: District Health Office. Poso, 2022

Most of the villages in this area can be traversed by four-wheeled vehicles, making it easier for people to access from one village to another. Most of the focus locations as places where Schistosomiasis breeds along the road.

The western Lore region is also known as the Bada Valley area, because the area is surrounded by mountains. In terms of modern government administration, the area that belongs to the Bada Valley includes two sub-districts, apart from the West Lore sub-district as well as the South Lore sub-district. Therefore, this schistosomiasis disease does not only have an impact on West Lore, but the impact is also felt on the people who live in South Lore, especially since the majority of the population's occupation is farming and gardening.

Based on data from the Central Statistics Agency for Poso Regency, the total population living in these two sub-districts is 9,962 people. The following is a detailed table of residents from the West Lore District and the South Lore District.

The government has announced that schistosomiasis eradication can reach 0% by 2025. Based on Permenkes number 19 of 2018, the Poso Regency Government and Village Governments in the West Lore and South Lore sub-districts are expected to have regulations (Perdes) relating to management and speed of eradication.



Increased community participation. Based on the initial data collected, it shows that most of the villages already have village regulations regarding the eradication of schistosomiasis. The following details the Perdes based on areas affected by Schistosomiasis.

table. Perdes Concerning Participation in the Alleviation of Schistosomiasis

No	Desa	Nomor Perdes	Tanggal Perdes
1	Tuare	1 Tahun 2019	22 Juli 2019
2	Kageroa	3 Tahun 2019	10 Agustus 2019
3	Tomehipi	5 Tahun 2019	6 Agustus 2019
4	Lengkeka	3 Tahun 2019	14 Agustus 2019
5	Kolori	6 Tahun 2019	29 Agustus 2019
6	Lelio	5 Tahun 2019	15 Agustus 2019

Source: Secondary research data, 2022

Although the number of snail foci is currently decreasing, the majority of villages at the time this research was conducted had not replaced the Perdes above. The management for eradicating schistosomiasis through the Perdes consists of; the use of PPE for farmers who carry out rice fields and plantation activities, feces collection, treatment, livestock breeding and cleaning of areas that are the focus areas of the snails. It should also be noted that although schistosomiasis is considered by the central government as an endemic and dangerous disease, until now the Poso District government does not yet have regulations or regional regulations regarding schistosomiasis. That means, the regulations that become binding are only the Village Regulations owned by the six (6) villages above.

The minimal role of the Government, especially the Poso Regency Government, has led to the initiative of the village government and the community in tackling this disease. Based on preliminary data from our interviews with the lelio village government, the village government has budgeted a budget originating from the Village Fund to finance/salary the cadres formed by the village government in connection with fecal collection.

Based on confirmation data from the cadres formed, the salary given is considered a minimum and does not match the workload assigned. In addition, the last salary received by these cadres was in 2019. That means, for three years the activities of these cadres were on personal and group initiatives. The "initiative" of these cadres and also the initiative of community groups is the result of a lack of administrative legitimacy from the government as a legal institution in carrying out its duties and roles. In fact, the role of community groups is a reality that tends to reduce the role of the state.

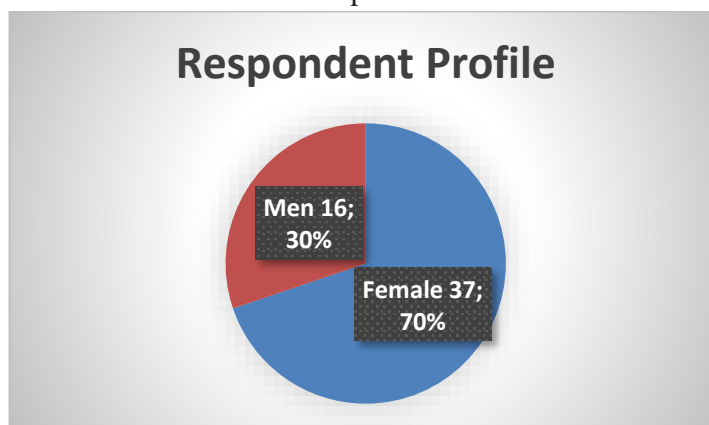
Basically, collaboration between the government, the private sector and the community is important to accelerate the eradication of this disease to 0% by 2025. This collaboration is necessary so that management or policies can be felt, because each policy and activity is carried out based on needs initiated by government and non-government

groups. The research results outlined in this progress report depart from the collaboration and interaction carried out by stakeholders in planning, implementing and evaluating the achievements of tackling schistosomiasis in the Bada valley. As we have described above, the model chosen in this study related to collaboration is the Pentahelix model which involves elements of government, private sector, community, businesspeople, media and academic

Community Perceptions in Controlling Schistosomiasis

To see community perceptions regarding the management of schistosomiasis, we distributed questionnaires to people living in the villages of Lengkeka, Tomehipi, Tuare and Kageroa Villages on 2 -3 August 2022. A total of 23 questions were distributed to the people in the four villages. To obtain a measure of the answers from each respondent, we use a Likert scale where each question is a statement whose values consist of Strongly Agree, Agree, Disagree, Disagree and Strongly Disagree. A total of 53 respondents were divided into 37 men and 16 women.

Picture. Respondent Profile



Based on the average education level of the respondents, 27 graduated from high school/equivalent, 6 graduated from S1, 15 graduated from junior high school and 5 graduated from elementary school. Meanwhile, the average occupation of the respondents is farming/gardening as is generally the case for people who live in the Bada valley region.

The first question we asked was related to the management of schistosomiasis, as the results of data processing are shown below.

Based on the results of the data processing, services, especially in the health sector, both facilities and health workers, are still considered jobs that need attention from the government. This is also reinforced by our observations in the field, there are very few primary health workers to accommodate the Bada valley region and its people.

Generally, the relations between the people in the Bada valley region have been going on harmoniously until now. In tackling schistosomiasis, the government actively involves the community, starting from making village regulations to involve the community, either directly involved in the prevention or to live a healthy life and equip themselves with



Personal Protective Equipment when doing activities in the garden. Community group wars can also be seen from their activities in socializing clean living. This socialization is generally carried out by community groups in churches after the service is over.

Next, we measured with a questionnaire regarding the perceptions of business actors regarding the management of schistosomiasis in the Bada valley. The average respondent answered that indeed this disease had an impact on people's economic activities. but when compared to the current economic situation is better than in the previous period. If examined, this statement is indeed true because schistosomiasis or Focus which is the habitat of snails is starting to decrease at this time when compared to the previous 2016-2019. The results of data processing based on this perception can be seen in the table below.

Perception	SS	S	KS	TS	STS
Current business conditions are better	2	15	12	18	6
People's income is getting better	0	18	11	14	10
the economic opportunities of the people affected	10	21	13	7	2
the community's economic efforts are not disrupted	9	25	13	4	2
There is a space for interaction between ethnicities/tribes/religions	26	17	4	6	0
The role of community/community groups is very helpful.	9	25	16	2	1
The government involves communities/groups in the process of tackling schistosomiasis.	17	9	12	10	5
Mutual cooperation is still maintained.	12	32	6	2	1

CONCLUSION

Policies that have existed so far at various levels of government are of course an effort to resolve the level of supervision through a cooperation mechanism between government institutions. It's a shame that no serious efforts have been made systematically and massively to make the problem of schistosomiasis, which is one of the endemic and unique diseases in Central Sulawesi, appear to have not experienced a shift in ability. There is no

comprehensive evaluation of the actors, content, context and processes that interact with this issue.

Interaction between various stakeholders is related to how government institutions, private businesses, communities, campuses and the media can interact actively and intensely to synergize in the schistosomiasis eradication agenda in Bada. This is related to how the model determines collaboration, formulation, institutionalization to be able to achieve the maximum management of schistosomiasis in the Bada region. This study did preparation of a governance model for tackling schistosomiasis with the pentahelix model to be able to build an interaction system outcome as an effective, efficient and sustainable model for treating schistosomiasis.

Recommendations

1. A model of involving and interacting with each stakeholder in alleviating the prevalence of schistosomiasis through a collaboration scheme.
2. This modeling is important for alleviating the treatment of schistosomiasis as a scheme for all stakeholders in implementing it.

REFERENCES

- Effendi, D., Syukri, F., Subiyanto, A. F., & Utdityasan, R. N. (2016). Smartcity Nusantara development through the application of Penta Helix model (A practical study to develop smart city based on local wisdom). 80–85.
- Firmansyah, 2017. Analisis Implementasi Kebijakan Pemerintah, Kinerja Serta Aktifitas Masyarakat Dalam Pengendalian Schistosomiasis Di Kabupaten Poso, Thesis, Universitas Airlangga
- Kent Buse, Nicholas Mays & Gill Walt Making, 2nd edition (1994). Health Policy Understanding: Public Health, the central role of policy analysis, Health Policy and Planning.
- Khairil Akbar, 2016. Indeks Prediktif Kejadian Schistosomiasis Berbasis Perilaku Masyarakat Di Dataran Tinggi Lindu Kabupaten Sigi. Thesis, Program Studi (S2) Epidemiologi Fakultas Kesehatan Masyarakat, Universitas Airlangga.
- Miles, M.B, Huberman, A.M, dan Saldana, J. (Terj. Tjetjep Rohindi), 2014. Qualitative Data Analysis, A Methods Sourcebook, Edition 3. Jakarta: UI
- Mulyono, 2013. Evaluasi Kebijakan Program Mobile Pusat Layanan Internet Kecamatan (MPLIK), Jurnal Penelitian Komunikasi Vol. 16 No. 2, Desember 2013: 205-220
- Ni Nyoman Veridiana, Sitti Chadijah, 2013. Faktor-faktor yang berhubungan dengan perilaku masyarakat dalam mencegah penularan schistosomiasis di dua desa Di dataran tinggi napu kapupaten poso, Sulawesi tengah tahun 2010, Media Litbangkes Vol 23 No. 3, Sept 2013, 130-136
- Ningsi dan Ikhtiar Hatta, 2017; Pengetahuan Masyarakat Lindu terkait Schistosomiasis, di Kabupaten Sigi, Sulawesi Tengah, Jurnal Vektor Penyakit, Vol. 11 No. 2, 2017 : 49 - 60
- Nugroho, Riant. 2011. Public Policy: Dinamika Kebijakan, Analisis Kebijakan, Manajemen Kebijakan. Jakarta: PT Elex MediaKomputindo.
- Mote, S. (2020). DISKURSUS TEORETIS PENERAPANGOOD GOVERNANCE DALAM FORMULASI KEBIJAKAN DAERAH. Jurnal Pemerintahan Dan Keamanan Publik (JP dan KP), 1–10.



- Newman, J., Barnes, M., Sullivan, H., & Knops, A. (2004). Public participation and collaborative governance. *Journal of social policy*, 33(2), 203–223.
- Ningsi, N., Veridiana, N., & Octaviani, O. (2021). PENGUATAN PERAN TOKOH AGAMA MENUJU ELIMINASI SCHISTOSOMIASIS DI DATARAN TINGGI BADA KABUPATEN POSO SULAWESI TENGAH.
- O’Leary, R., Bingham, L. B., & Choi, Y. (2010). Teaching collaborative leadership: Ideas and lessons for the field. *Journal of Public Affairs Education*, 16(4), 565–592.
- Pasinringi, A., Alamsyah, M. N., & Nawawi, M. (2021). Leadership in Schistosomiasis Eradication Policy in Indonesia. *Journal Dimensie Management and Public Sector*, 2(3), 51–61. <https://doi.org/10.48173/jdmpps.v2i3.116>
- Patton, Carl V and Sawicki David S., 1986. *Basic Methods of Policy Analysis and Planning*. Englewood Cliffs New Jersey: Prentice Hall .
- Pitriani, Muh. Jusman Rau, 2017. Eliminasi Schistosomiasis Di Sulawesi Tengah; Review Sistematis Dan Fokus Group Discussion, *Jurnal Muara Sains, Teknologi, Kedokteran, dan Ilmu Kesehatan* Vol. 1, No.1, April 2017: hlm 67-74.
- Putranto, D. W. (2017). PROSES KOLABORASI ANTARA PEMERINTAH DAERAH DENGAN LEMBAGA SWADAYA MASYARAKAT DALAM UPAYA PENCEGAHAN PENYAKIT HIV- AIDS DI KOTA SURABAYA.
- Rahmat Alyakin Dachi, 2016. Modul mata kuliah; Administrasi Kebijakan Kesehatan, Medan: Program Studi Ilmu Kesehatan Masyarakat Universitas Sari Mutiara Indonesia Medan
- Rosmini Rosmini, Triwibowo A Garjito, Ahmad Erlan, Gunawan Gunawan, 2014. Infection Rate Host Perantara Dan Prevalensi Reservoir Schistosoma japonicum Di Dataran Tinggi Bada, Sulawesi Tengah, *Jurnal Ekologi Kesehatan* Vol. 13 No 1, Maret 2014 : 43 – 49
- Rosmini, Triwibowo A. Garjito, Ahmad Erlan, Gunawan, 2014. Infection Rate Host Perantara Dan Prevalensi Reservoir Schistosoma Japonicum Di Dataran Tinggi Bada Sulawesi Tengah, *Jurnal Ekologi Kesehatan* Vol.13 No 1, Maret 2014 : 43 – 49
- Samudra Wibawa, (dkk), 1994, Kebijakan Publik, Proses dan Analisis, Intermedia, Jakarta
- Selfi Renita Rusjdi, 2011. Schistosomiasis, Hubungan Respon Imun dan Perubahan Patologi. *Majalah Kedokteran Andalas* No.2. Vol.35. Juli- Desember 2011.
- Sema Ardianto dan Widayati, 2018. Public Policy Analysis by The Government of Pati on Negative Impact of Prevention of Karaoke for The Tourism Businesses, *Jurnal Daulat Hukum* Volume 1 Issue 3 September 2018.
- Sudiana, K., Sule, E. T., Soemaryani, I., & Yunizar, Y. (2020). The development and validation of the penta helix construct. *Business: Theory and Practice*, 21(1), 136–145.
- Tonkovic, A. M., Veckie, E., & Veckie, V. W. (2015). Applications of Penta Helix model in economic development. *Economy of eastern Croatia yesterday, today, tomorrow*, 4, 385–393.
- Udik Budi Wibowo, 2011. Intensitas Peran Aktor Kebijakan Dan Kekuatan Politik Dalam Perumusan Kebijakan Sertifikasi Pendidik