

# STAKEHOLDER MAPPING IN THE PROVISION OF YOUTH-FRIENDLY REPRODUCTIVE HEALTH SERVICE IN INDONESIA

Antono Suryoputro<sup>1,2,\*</sup>, Pimonpan Isarabhakdi<sup>1</sup>, Muthmainnah<sup>3</sup>

<sup>1</sup> Institute for Population and Social Research, Mahidol University, Nakhonpathom, 73170, Thailand

<sup>2</sup> Faculty of Public Health, Diponegoro University, Central Java, Indonesia

<sup>3</sup> Faculty of Public Health, Airlangga University, Indonesia

## ABSTRACT:

**Background:** Indonesia has made slow progress in identifying reproductive health needs of young people and in formulating related policy. As a result of political sensitivity, policy dialogues have not yet been translated into reproductive health programs and services for young people. Existing Youth Reproductive Health Programs provide mostly basic information on sexuality and reproductive health, but do not provide services. As a consequence, the reproductive health needs of unmarried youth in Indonesia remain unfulfilled. This study aims to identify the roles of stakeholders and explore their position and involvement in the policy formulation and implementation of Youth Friendly Reproductive Health Service (YFRHS) in Central Java, Indonesia.

**Methods:** The study used a qualitative approach through in-depth interviews to collect data from the total of fifteen stakeholders who are related to the provision of youth-friendly reproductive health service in the city. Stakeholder analysis framework and mapping were employed to identify the roles and involvement of stakeholders.

**Results:** Mapping results indicates that among stakeholders related to the provision of YFRHS, the Regional Planning and Development Board was identified as the most important stakeholder in providing policy and environmental support and was categorized as a 'savior' because it had supportive attitude, strong influence and was actively involved in the provision of YFRHS program. The community health centers that are coupled with a local school were found to be the most important stakeholder in provision of YFRHS. District health office had position as 'friend' in conducting problem identification, preparation, implementation and external socialization whilst district office for education and culture was categorized as an 'observer' in the program preparation, problem identification and implementation of YFRHS. User stakeholders had position as a 'friend' in strategic advocacy, coordination, external socialization and implementation of YFRHS because they had supportive attitude but did not have authority and were only passively involved in the implementation of YFRHS.

**Conclusion:** Given the rigidity of existing policies related to the provision of YFRHS, more intensive advocacy to related stakeholders should become a higher priority. Such advocacy should promote the Regional Planning and Development Board as a powerful regional planning board, the community health centers which are coupled with schools as the main service provider, and in-school adolescents as the primary user. Synchronizing the existing roles, actively involving stakeholders, and clearly defining roles of each stakeholder should be continuously performed in order to create an attitude of mutual support in providing youth-friendly reproductive health service in Indonesia.

**Keywords:** Stakeholder mapping, Youth, Reproductive health service, Indonesia

DOI:

Received: February 2016; Accepted: April 2016

## INTRODUCTION

Young people in Indonesia are experiencing the impact of globalization as are their counterparts in other Asian countries. Extreme rapid social, cultural

and demographic changes, spread of mass media,

\* Correspondence to: Antono Suryoputro  
E-mail: antonosuryoputro@yahoo.com

Cite this article as:

Suryoputro A, Isarabhakdi P, Muthmainnah. Stakeholder mapping in the provision of youth-friendly reproductive health service in Indonesia. *J Health Res.* 2016; 30(6): 377-86. DOI:

economic and political crises, increasing access to recreational drugs and alcohol have become the most threatening factors to young people's lives [1-3]. These changes, together with urbanization and the spread of information across nations have increased the risk related to young people's health. Augmented interaction of adolescents is associated with high risk behaviors such as excessive alcohol and tobacco consumption, drug use and sexual behavior that can result in unwanted pregnancy and sexually transmitted diseases (STD) including HIV and AIDS [1,4-6]

Since 2000, Indonesia has made a slow progress in identifying reproductive health needs of young people and in formulating related policy. However, their needs for better sexual and reproductive health information and education in schools have been recognized. It is important particularly in light of the growing epidemic of STD and HIV/AIDS in Indonesia. Nevertheless, as a result of political sensitivity, policy dialogues have not yet been translated into reproductive health programs and services for young people [7-10]. Existing youth reproductive health (YRH) programs provide mostly basic information on sexuality and reproductive health, but do not provide services. Indeed, the Indonesia Family Welfare Act (UU no 10/1992) forbids unmarried young people to access family planning and contraception information and services [8, 9]. Additionally, the existing Information, Education and Counseling (IEC) programs provide information which is mostly limited to promotion of traditional family, moral and religious norms rather than information on sexual and reproductive health, including how to avoid unsafe sex [7, 11, 12].

Although several studies on YRH issues have been done in Central Java, the focus is primarily on the demand side of YRH services such as youth sexual behavior, attitudes and knowledge of reproductive health and STDs and HIV/AIDS [5, 12, 13]. Studies that focus on the supply side and stakeholders' map of YRH services more need to be undertaken to provide a broader and clearer picture on implementation of YRH services in Central Java, Indonesia.

Stakeholder mapping is a framework in program management, which recognizes the complexity of the social system and the influence or limitations of the intervention program. The orientation of this approach is the behavior change of the actors, interaction between actors, and the

mapping of these changes. In it, there is a process to plan, define who plays what role and relationship, how to achieve it, and how to keep track of the progress. This mapping is also the best integrated approach to planning, monitoring and evaluation which can be used at the beginning of the program after the main focus is determined [14-16]. In every policy making process, stakeholder's commitment plays an important role. The commitment of leaders and decision makers in all levels and sectors greatly influences policy making and the effort to address organizational issues. These commitments can be seen from verbal or written statements about their support and or agreement toward particular organizational issues. Furthermore, commitment can also be developed based on how much time, effort, ideas, moral support and even financial support a stakeholder can dedicate to an organization. The purposes of stakeholder mapping are; (1) As a method to map the stakeholders associated with a program or policy, (2) To provide an overview of the factors associated with a program or policy, (3) Help focus advocacy to each intended stakeholder, and (4) Showing the advantages and disadvantages of each stakeholder associated with a particular program or policy [16,17].

This study aims to identify the roles of stakeholders and explore their position and involvement in the policy making process and implementation of Youth Friendly Reproductive Health Service (YFRHS) in Central Java, Indonesia.

## METHODS

This study employed a qualitative approach by collecting detailed information on policies and other environmental support systems through in-depth interviews. The information was collected from key informants who involved in YFRHS and related institutions such as schools, health offices, and local authorities in Central Java Indonesia. The key informants in this study were totally fifteen stakeholders who contributed to the implementation of YFRHS program in the city. They were chosen purposively in accordance with the YFRHS guide, where the adolescent reproductive health team determines the successful implementation of the YFRHS program. Sampling was based on the adequacy of information on the YFRHS program in the city, by considering sampling principles of appropriateness and adequacy [18].

Stakeholders who involved in the YFRHS program were identified and selected as research

subjects in this study. It consists of ten types of stakeholder that were grouped based on their role and function related to provision of youth friendly reproductive health service, which were; decision maker and service provider. The results of the stakeholder groupings were as follow: (1) **Decision-maker stakeholders**, consisted of the Regional Planning and Development Board, district health office, district office for religious affairs, district office for education and culture, stakeholders in district office for social services, youth and sports; (2) **Service provider** stakeholders, consisted of 5 community health centers and teachers who in charge in adolescent reproductive health education (5 guidance and counseling teachers of schools in the community health centers coverage area).

In-depth interviews were employed to collect qualitative information from selected stakeholders by appointments. The collected information from the in-depth interview was recorded and transcribed and the data was then grouped and analyzed by applying the content analysis method [19].

Ethical clearance of this study was obtained from Commission on Health Research Ethics, Faculty of Public Health, Diponegoro University (no 246/EC/FKM/2013, dated 21 October 2013) prior to data collection.

Steps of qualitative data analysis were as follows:

1. *Characteristics of stakeholder* - stakeholder identity including; age, level of education, occupation, length of employment, organization's origin.

2. *Stakeholder power* - perception of stakeholders in influencing YFRHS program implementation. Influence is indicated in categories; 'strong' and 'weak'.

3. *Stakeholder attitude* - perception of stakeholders in supporting YFRHS program implementation. Attitude is indicated in categories; 'supportive' for positive attitude and 'non supportive' for negative attitudes.

4. *Stakeholder interest* - perception of stakeholders to engage in the YFRHS program implementation. Interest is indicated in categories; 'active' for those who are willing to engage and 'passive' to those who are unwilling or reluctant to engage.

5. *Stakeholder mapping* - analyzing attitude, influence, and involvement of each stakeholder (decision maker, provider, and user) relating to the function and role in the YFHS program

implementation.

Stakeholder analysis framework in this study employed mapping analysis tool approach adopted from Lusidus Consulting Ltd. [17] and stakeholder classification model from Vos and Achterkamp [14]. According to stakeholder mapping model adapted from Lucidus Consulting Ltd., there are stakeholder potential categories based on three dimensions, namely; attitude, power and interest. The extent of these dimensions in each stakeholder will determine their group position categories [20] as explained below:

**Savior** is addressed to those who have supportive attitude, strong influence and active involvement. The parties will do whatever is necessary to maintain their alignment, as well as pay attention to their needs.

**Sleeping giant** are those who have supportive attitude, strong influence but passive involvement. They need to be included in the process in order to be awakened.

**Friend** refers to those who have supportive attitude, weak influence but active involvement. They should be positioned as a confidant or adviser.

**Observer** usually has supportive attitude, weak influence and passive involvement. This group of stakeholders needs to be kept in touch and continuously be given information [17, 20].

Among those in non-supportive group, **saboteurs** are those with non-supportive attitude, strong influence and active involvement, whilst **trap** is given to those who have non-supportive attitude, weak influence and passive involvement. They need to be understood, so that they can be cautiously approached. **Irritants** are those who have non-supportive attitude, weak influence but active involvement, and **time-bomb** refers to a group of stakeholders with non-supportive attitude, strong influence and passive involvement [17, 20]

The result of stakeholder's analysis was a map of various position stakeholders in providing youth friendly reproductive health services in the city.

## RESULTS

### Characteristics of stakeholder

Majority of informants in this category (decision maker stakeholder) hold a master's degree, all of them were male with age range of 40 to 52 years old, and works as head of sections/division which were related to the provision of YFRHS and program in the city.

**Table 1** Mapping of decision maker stakeholders in YFRHS

Stakeholder		Planning & policy advocacy	Implementation	Reporting, recording and evaluation
<b>Regional Planning and Development Board</b>	Attitude	+		
	Power	+		
	Involvement	+		
		SAVIOR		
<b>District health office</b>	Attitude	+	+	+
	Power	-	-	-
	Involvement	-	-	-
		OBSERVER	OBSERVER	OBSERVER
<b>District office for education &amp; culture</b>	Attitude	+	+	+
	Power	+	+	-
	Involvement	+	+	-
		SAVIOR	SAVIOR	SAVIOR
<b>District office for social youth sport 1</b>	Attitude	+	+	+
	Power	-	-	+
	Involvement	-	+	-
		SAVIOR	FRIEND	Sleeping giant
<b>District office religion affair</b>	Attitude	+	+	+
	Power	-	-	-
	Involvement	-	+	-
		OBSERVER	FRIEND	OBSERVER

Attitude: (+) Supportive attitude, (-) Not supportive

Power: (+) Strong power/influence, (-) Weak power/influence

Involvement: (+) Actively involve (has strong interest), (-) Passively involve (has no interest)

Other informants were service provider stakeholders who directly in charge in providing services for youth both inside and outside of health centers. All providers (10 informants) in community health centers (YFRHS program officers) and school (guidance and counseling teachers) were college educated with age range between 27 to 54 years old, and most of them were female (73.34%).

### Stakeholder mapping based on stakeholder perception on their influence/power, attitude and involvement/interest in YFRHS and program

#### Decision maker-stakeholder

As described in Table 1, decision maker stakeholders in this study consists of five government institutions in the city, including Regional Development and Planning Board, district health office, district office for education and culture, district office for social youth sport, and district office for religion affair. The result indicates that the decision maker group generally had a strong support to the provision of the YFRHS and program in the city. However, when classified into their degree of support, the difference among stakeholders occurs. Majority of policy makers

(decision maker) stakeholders were categorized as a 'savior', 'observer' and 'friend' in the provision of YFRHS and program in the city.

Regional Planning and Development Board was categorized as a 'savior' because it had supportive attitude, strong influence and was actively involved in the provision of YFRHS and program, which includes activities such as problem identification, public policy advocacy, integration, collaboration and coordination. Regional Planning and Development Board had a strong influence in determining the program planning of each decision-making stakeholder who had adolescent health related program and also has being actively involved in the public policy advocacy. In this case, it's task was to facilitate coordination with all stakeholders of adolescent health related programs in order to avoid overlapping among similar adolescent programs in the city. This can be explained by the statement below:

*"...Regional Planning and Development Board takes care of the macro planning, but the technical implementation is distributed to each regional government unit, our job is to*

*evaluate whether the programs of each unit is in accordance with the city's MDG strategic planning. So the units strategic planning must refer to the regional master plan, to achieve 2015 MDGs ..... “*

District/city health office is the leading institution in the initiation and implementation of YFRHS. Results of the mapping analysis indicates that position of district health office as a ‘savior’ in the provision of YFRHS activities such as planning, public policy advocacy, collaboration and coordination, monitoring and evaluation, and data recording & reporting. District/city health office had supportive attitude, strong influence and active involvement in conducting public policy advocacy. Public policy advocacy is the district health office’s effort to influence relevant stakeholders for the implementation and sustainability of the adolescent health programs. Therefore, district health office also had a strong influence and was actively involved in conducting inter-sector cooperation.

In addition, district health office had position as ‘friend’ in conducting problem identification, YFRHS preparation, implementation and external socialization. It suggests that district health office had weak influence and passive involvement. It delegates the tasks to the YFRHS program officers in community health center in the implementation of YFRHS and program ranging from planning, monitoring and evaluation to socialization.

The next decision maker stakeholder is district office for education and culture, which was classified as a ‘savior’ in carrying out advocacy, coordination and monitoring and evaluation. The role of district office for education and culture was very important in provision of adolescent health programs in schools, as shown by the following statements:

*“...We don't have much knowledge and resources in the health sector so we must partner up with the district health office to conduct the healthy schools program. District health office helps us educate health information and related issues to schools students and teachers...”*

*“...The school health unit program is a joint decree, we share the responsibility with district health office, social welfare, district office for religious affairs...”*

*“...We have a monthly coordination meeting to discuss about the healthy schools program...”*

The statements above shows that the implementation of health programs in schools is carried out by the Ministry of Education and Culture in cooperation with other institutions such as Ministry of Health and Ministry of Religious Affairs. District office for education and culture was categorized as an ‘observer’ in the YFRHS preparation, problem identification, implementation and data recording and reporting. The office fully delegates schools in the city to implement their own school health program based upon each school's ability.

The social service section of district office for social youth and sport was classified as a ‘friend’ in the provision of YFRHS. It means that the section/division has a supportive attitude, weak influence and passive involvement in the program. This section/division mainly serves to enhance youth skills through many workshop and trainings. They believed that adolescent health programs become the responsibility of schools and the district health office.

The last decision maker stakeholder is district office for religion affair. Its position was as a ‘friend’ in conducting the problem identification, advocacy, implementation, monitoring and evaluation and data recording and reporting. Please refer to the following statement:

*“...It is actually needed but we don't have the budget, so we usually only follow the central government program, even if there is a program in the research development section that focuses on Islamic education...”*

*“...Programs like that are supposed to be known by everyone, too bad we don't have a specific health program. If there is an invitation from social welfare we're always proactive...”*

The statement indicates that the district office for religion affair had a supportive attitude in the implementation of YFRHS programs. It supports YFRH programs but has weak authority, and passive involvement. Furthermore, district office for religion affair had no specific adolescent health programs due to budget and human resources limitations.

**Table 2** Mapping of provider stakeholders in YFRHS

Stakeholder		Planning & policy advocacy	Implementation	Reporting, recording and evaluation
<b>Community health center 1</b>	Attitude	-	+	+
	Power	-	+	-
	Involvement	-	+	-
		TRAP	SAVIOR	SAVIOR
<b>Community health center 2</b>	Attitude	-	+	+
	Power	+	+	+
	Involvement	-	+	+
		TRAP	SAVIOR	SAVIOR
<b>Community health center 3</b>	Attitude	-	+	+
	Power	-	+	-
	Involvement	-	+	-
		TRAP	SAVIOR	OBSERVER
<b>School 1</b>	Attitude	+	+	+
	Power	+	+	-
	Involvement	+	+	+
		SAVIOR	SAVIOR	FRIEND
<b>School 2</b>	Attitude	+	+	+
	Power	+	+	+
	Involvement	+	+	+
		SAVIOR	SAVIOR	SAVIOR
<b>School 3</b>	Attitude	+	+	+
	Power	-	-	-
	Involvement	-	-	-
		OBSERVER	OBSERVER	OBSERVER

Attitude: (+) Supportive attitude, (-) Not supportive

Power: (+) Strong power/influence, (-) Weak power/influence

Involvement: (+) Actively involve (has strong interest), (-) Passively involve (has no interest)

### **Service provider stakeholder**

The majority of stakeholders in this group were classified as 'savior'. As illustrated in Table 2, most of the informants in this stakeholder group support have influence and was actively involved in the implementation of YFRHS strategic measures.

Community health center is a stakeholder which plays an important role in the implementation of YFRHS program. Community health center is subordinate of the district health office, providing health service needed by community including youth both inside and outside of the health center. Finding indicates that community health center was classified as 'savior' in YFRHS program implementation. It supports, has strong influence and is actively involved in the implementation of YFRHS. However, in problem identification aspect, only one community health center was positioned as 'savior', while the others had position as a 'trap'. This can be shown from the interview as follows:

*"...We are equipped by the district health office to provide health services, so it has*

*been decided that we can't conduct direct survey to teenagers since they will not be very open to adults, because they are scared of being judged by adults..." Community health center 1*

*"...If we conduct everything we won't have the energy and resources left. If we carry out surveys before the activities to figure out what the teenagers need, we do not have enough time..." Community health center 3*

The above statements indicate that most of community health center did not support, did not have authority and had passive involvement in carrying out the identification of adolescent health issues. In addition, finding also points out the role of problem identification was mainly conducted by the district health office. Community health centers only conduct activities based on what district health office orders. On the other hand, all community health centers supported, had strong influence and were actively involved in implementing public

policy advocacy, coordination, program implementation, and monitoring and evaluation activities. However they still face some obstacles in its implementation due to limited human resources, overlapping tasks among health officers, facilities and infrastructure limitations. Other aspects including budget constraints, service procedures that were not yet adjusted to the characteristics of adolescents and not all officers are YFRHS trained were also identified as some obstacles in providing YFRHS and program. Additionally, conducting data collection or implementation of YFRHS activities outside the community health center building also faces a lot of obstacles such as limited human resources and different understanding about collected data between community health centers.

Schools are one of the community health center networks in implementing YFRHS in schools. Supervision of community health center to school is necessary to achieve good youth health through School health unit, networking, socialization/education, and reproductive health education in extracurricular or extracurricular programs. In this study, the selected informants were guidance and counseling teachers who were specifically appointed by the community health center to coach the School Health Unit program in school. The finding suggests that schools were classified as a 'savior' in conducting problem identification, coordination, and implementation of YFRHS in schools. Reproductive health related information in schools were delivered by teachers on guidance and counseling, biology and religion. Surprisingly, most of the teachers were not familiar with the term "youth friendly reproductive health service". Even the guidance and counseling teachers did not know that community health centers provide information services, counseling services and training of peer educators. Reproductive health information at schools are usually delivered through guidance and counseling, biology and religion teachers as well as through extracurricular activities, seminars, or counseling given by academics, community health centers and non-government organizations.

## DISCUSSION

The results of the stakeholder classification indicate that the successful development of a YFRHS program in the city would depend on several important players including the government as decision-maker, program implementers (schools, community health centers), and clients (school

adolescents). According to Vos and Achterkamp [14], stakeholder mapping is an approach developed to overcome the fundamental issues related to the reporting of development impact. Complexity and flexibility of a development process means that in order to achieve "impact" it requires the involvement of various parties, and often takes place during a long period of time [21, 22]. Large-scale changes are often the result of a collection of events, over which no single institution has full control, nor can they acknowledge themselves as the sole merit. In this way, we can identify by mapping one of the factors or parties as the party who has the strongest influence to the impact of development.

The results of the stakeholder mapping illustrate the diversity of their commitment and support toward provision of YFRHS. It indicates that most of the stakeholders in the city tend to be classified as 'savior' in the provision of the YFRHS program, whereby 'savior' is the stakeholder's positive support attitude, has strong influence and is willing to be actively involved. Therefore, special attention should be given to them for maintaining their supportive attitude.

Decision-maker stakeholder group provides strong support and strong influence to the provision of YFRHS in the city. Among them, the Regional Planning and Development Board, the district health office and district office for education and culture were given the position of 'savior'. However, since Regional Planning and Development Board is a planning board of the city, its role in implementation of YFRHS is limited. The board is involved mainly in providing policy and regulation support toward the development of youth health-related programs by stakeholders in the city. Furthermore, Regional Planning and Development Board has a very strategic role in the implementation of a program in terms of planning and resource allocation, which gives the board a legitimate power and authority to control and distribute available resources to relevant parties. On the other hand, the district office for religion affair and district office for social youth and sport are associated with negative attitudes and passive involvement in the provision of YFRHS. The finding has similar result with other stakeholder analysis studies in the region which indicates that Planning Boards and other government institutions had significant roles in better targeting and increase budgetary allocation for prioritized programs [15, 16, 23]. Therefore, in order to assure the provision of YFRH service, more intensive advocacy to

Regional Planning and Development Board need to be maintained to gain budget allocation and other resources supports. In this study, the stakeholders are institutions that already have youth-related health programs, thus making it easier for them to achieve a common goal. However, finding of this study indicates the existence of insensitivity. Each of the stakeholders seems concentrated only on their own programs even when the targets are similar, indicating a failure in integrating related youth programs and services. Finding also indicates the absence of a clear role distribution among providers as each stakeholder still maintains their own programs. Such situation exists perhaps because of the existence of many government programs relating to adolescent health [1, 21, 22, 24, 25]. For instance, the district health office and district office for education and culture are potential stakeholders in the implementation of the YFRHS program. Each of them has youth health programs and are always actively involved in the coordination of activities.

Furthermore, finding also indicates lack of inter-program cooperation and integration due to the lack of transparency of budget allocation for each program. Therefore, a key stakeholder who has strong power and influence is needed to unite all existing youth health programs. In this case, local government should involve every related stakeholder and community in the coordination process in order to achieve a common agenda. The government should approach the various relevant stakeholders to participate and interact with each other to establish an integrated program in promoting youth health [16, 22].

In addition, government institutions should be intensively involved in the formulation or development of a public policy as well. This is related to the understanding that a policy is something that is usually formulated by the government in order to address certain issues and, therefore, the involvement of government officials may help determine the likelihood that a given policy is approved [15, 16]. In this case, government institutions have become an important factor in the policy-making process. Furthermore, the process of formulating a policy needs the involvement of every party, whether officially or unofficially. Hence, the most important thing is to understand the characteristic of each party, their roles, the authority or power that they have, and how they relate and monitor each other. Anderson, Lindblom, Lester and Steward [20] explained that many factors can

influence the decision makers, which may relate to the variety of stakeholders involved, such as political and social pressures, economic conditions, procedural requirements, prior commitments, lack of time and other factors. Various studies in the Asian countries include China, Malaysia, Myanmar and Thailand demonstrated different impacts of external situation to the policy makers in their decision making. Political factor was found to have a significant impact in providing health services in Myanmar and Malaysia [5, 26, 27], on the other hand, social pressure was the main external influence in providing sexual and reproductive related services for youth in other countries [5, 26, 28].

The school is one of the community health center's partners in the implementation of YFRHS in school. It provides health-related programs and services for adolescents in school through the school health unit which is administered by school teachers under supervision from community health center. School health unit's activities mainly focus on behavior change of adolescents, including sexual and reproductive health behavior, by providing information and counseling services. However, since many of schools experience lack of trained teachers, such activities are not properly carried out. Therefore, more intensive involvement of community health centers is needed to guide the schools in carrying out such activities. Strong partnerships between community health center and school should be established with support from local government. In addition, the provider stakeholder of the YFRHS program in the city comprises different professional backgrounds and different work focuses. This situation might affect implementation of YFRHS, and needs solid integration of providers in delivering services. Thus, a mutually-supportive attitude and interaction between stakeholders should be strongly encouraged in implementation of YFRHS, so that their willingness to share information, conduct problem-solving and combine their respective powers could be performed. As demonstrated from some studies in South East Asian countries, policy maker support is essential in providing services and implementing programs [15, 21, 29]. For instance, counseling services through hotline telephone service to reduce the sexual and reproductive health vulnerability among Thai's adolescents, needs policy makers special support [23, 27]. A study among young urban Myanmar also indicated a need of policy

maker support to develop comprehensive sex education program [28]. Therefore, stakeholder mapping is a potentially useful method in health policy research to gain understanding of the relationship dynamic among various stakeholders.

## CONCLUSION

Among stakeholders related to the provision of YFRHS, the Regional Planning and Development Board was identified as the most important stakeholder in providing policy and environmental support. The community health centers that are coupled with a local school were found to be the most important stakeholder in provision of YFRHS. The findings also found an absence of information received by in-school adolescents about the existence of YFRHS provided in community health centers.

The finding of the study revealed that synchronizing the existing roles, actively involving stakeholders, and clearly defining roles of each stakeholder should be continuously performed in order to create an attitude of mutual support in providing youth friendly reproductive health service in the city.

Given the rigidity of existing policies related to provision of YFRHS, more intensive advocacy to related stakeholders should also become a higher priority. Such advocacy should address the Regional Planning and Development Board as a powerful regional planning board, the community health centers which are coupled with schools as the main service provider, and in-school adolescents as the primary user.

Stakeholders mapping is a very useful method in identifying roles and degree of each stakeholder support in providing YFRH service and related policies. Therefore, advocacy strategy can be focused to the identified important stakeholders. However, assessment of mapping analysis has disadvantage as it may be subjective and not all stakeholder interests can be met at the same time

## ACKNOWLEDGEMENTS

This research was financially supported/partially supported by Directorate General for Higher Education, Indonesia Ministry of Education and Culture. We thank our colleagues from Master Program on Reproductive Health and HIV and AIDS, Diponegoro University Indonesia, who provided insight and expertise that greatly assisted

the research, and for their comments that greatly improved the manuscript.

## REFERENCES

1. Utomo ID. Adolescent reproductive health in Indonesia: status, policies, programs, and issues. Canberra: Australian National University (ANU); 2003.
2. Woog V, Singh S, Browne A, Philbin J. Adolescent women's need for and use of sexual and reproductive health services in developing countries. New York: Guttmacher Institute; 2015.
3. The National Population and Family Planning. Study of adolescent population profile (10-24 years old): what's up with adolescent? [N.p.]: Center of Population Research and Development; 2012.
4. Gray N, Azzopardi P, Kennedy E, Willersdorf E, Creati M. Improving adolescent reproductive health in Asia and the Pacific: do we have the data? A review of DHS and MICS surveys in nine countries. *Asia Pac J Public Health*. 2013 Mar; 25(2): 134-44.
5. Chi X, Hawk ST, Winter S, Meeus W. The effect of comprehensive sexual education program on sexual health knowledge and sexual attitude among college students in Southwest China. *Asia Pac J Public Health*. 2015 Mar; 27(2): NP2049-66.
6. Hidayangsih PS, Tjandrarini DH, Mubasyiroh R, Suparmi S. Factor influencing risky sexual behavior of Makassar adolescents. *Indonesian Journal of Reproductive Health*. 2011; 39(2):88-98
7. Shaluhiah Z, Ford NJ. Sociocultural context of adolescent pregnancy, sexual relationships in Indonesia, and their implications for public health policies. *International Handbook of Adolescent Pregnancy*. New York, USA: Springer; 2014. p. 359-78.
8. Central Bureau of Statistic [CBS], National Family Planning Coordination Board [NFPCB]. Indonesia young adult reproductive health survey 2002-2003. Jakarta: Badan Pusat Statistik; 2004.
9. Central Bureau of Statistic [CBS], National Family Planning Coordination Board [NFPCB]. Indonesia young adult reproductive health survey 2007. Jakarta: Badan Pusat Statistik; 2007.
10. Suryoputro A, Ford NJ, Shaluhiah Z. Faktor-faktor yang mempengaruhi perilaku seksual remaja di Jawa Tengah: implikasinya terhadap kebijakan dan layanan kesehatan seksual dan reproduksi. *Makara Kesehatan*. 2006; 10(1): 29-40. (in Indonesian).
11. Situmorang A. Adolescent reproductive health in Indonesia. Jakarta: USAID STARH Program Johns Hopkins University/Center for Communication Program Jakarta, Indonesia; 2003.
12. Webster TW. The ongoing culture debate: female youth and pergaulan (Bebas) in Yogyakarta, Indonesia. *Youth Identities and Social Transformations in Modern Indonesia*. Netherlands: Brill; 2015:218.
13. Widyastari DA, Isarabhakdi P, Shaluhiah Z. Women won't get pregnant with one sexual intercourse:

- misconceptions in reproductive health knowledge among Indonesian young men. *J Health Res.* 2015; 29(1): 63-9.
14. Vos JF, Achterkamp MC. Stakeholder identification in innovation projects: going beyond classification. *European Journal of Innovation Management.* 2006; 9(2): 161-78.
  15. Htet S, Fan V, Alam K, Mahal A. Financial risks from ill health in Myanmar: evidence and policy implications. *Asia Pac J Public Health.* 2015 May; 27(4): 418-28.
  16. Makan A, Fekadu A, Murhar V, Luitel N, Kathree T, Ssebunya J, et al. Stakeholder analysis of the Programme for Improving Mental health care (PRIME): baseline findings. *Int J Ment Health Syst.* 2015; 9: 27. doi: 10.1186/s13033-015-0020-z
  17. Murray-Webster R, Simon P. Making sense of stakeholder mapping. *PM World Today.* 2006; 8(11): 1-5.
  18. Gilbert N. *Researching social life.* 2<sup>nd</sup> ed. London: Sage; 2008.
  19. Silverman D. *Doing qualitative research: a practical handbook.* London: SAGE Publications; 2013.
  20. Howlett M, Ramesh M, Perl A. *Studying public policy: policy cycles and policy subsystems.* Cambridge: Cambridge University Press; 1995.
  21. Utomo ID, McDonald P. Adolescent reproductive health in Indonesia: contested values and policy inaction. *Stud Fam Plann.* 2009 Jun; 40(2): 133-46.
  22. Kennedy E, Bulu S, Harris J, Humphreys D, Malverus, J, Gray N. Increasing adolescents' access to sexual and reproductive health services in Vanuatu. In: *women's and children's health knowledge hub: Policy Brief.* [N.p.]; 2013.
  23. Yamarat K, Havanond P, Chuenchit M. Reproductive and sexual health problems: Reported by Bangkok's telephone hotline. *J Health Res.* 2014; 28(4): 263-7.
  24. Situmorang A. *Adolescent reproductive health in Indonesia.* Jakarta: STARH Program; 2003.
  25. Kesterton AJ, Cabral de Mello M. Generating demand and community support for sexual and reproductive health services for young people: A review of the Literature and Programs. *Reprod Health.* 2010; 7: 25. doi: 10.1186/1742-4755-7-25
  26. Singkun A, Yamarat K, Havanond. Needs assessment on sexuality and reproductive health education of secondary school students in Yala Province, Thailand. *J Health Res.* 2014; 28(5): 327-34.
  27. Marzuki N, Ismail S, Al-Sadat N, Ehsan FZ, Chan CK, Ng CW. Integrating information and communication technology for health information system strengthening: a policy analysis. *Asia Pac J Public Health.* 2015 Nov; 27(8 Suppl): 86S-93S. doi: 10.1177/1010539515590180
  28. Hein A, Hongsraragon P, Havanond P. Sexual perception and attitude of young urbanized Myanmar people consuming internet pornography and social networking channels. *J Health Res.* 2013; 27(4): 267-70.
  29. Suwandi A. Report on youth friendly health services and program. [N.p.]: Semarang Health Office; 2012.