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Original Article

Stakeholder Analysis of Cervical Cancer Early Detection Programs at Wangon I Community Health Center, Banyumas Regency Using the Power–Interest Grid

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ABSTRACT

Background: The achievement of cervical cancer screening in Banyumas Regency remains below target despite implementation of HPV immunization and VIA screening. This study analyzed stakeholders involved in the cervical cancer early detection program at Wangon I Community Health Center (CHC).

Methods: A qualitative case study was conducted from October–December 2024. Six primary informants and two supporting informants were selected through purposive and snowball sampling. Data were collected through in-depth interviews, document review, and observation. Thematic analysis was performed and stakeholder mapping was conducted using operational indicators of power and interest. Credibility was strengthened through source triangulation and member checking.

Results: Stakeholders were classified as key, primary, and secondary stakeholders. Based on the power–interest grid, the Health Office, Head of CHC, MCH officer, and Immunization officer were categorized as key players. Village heads, school principals, religious leaders, and sub-district government were categorized as keep satisfied stakeholders. Midwives, cadres, PKK, PLKB, and partner laboratories were categorized as keep informed stakeholders. Women of reproductive age and students were categorized as minimal effort stakeholders. Interview findings indicated that screening achievement was influenced by stakeholder collaboration, community awareness, and cross-sectoral support.

Conclusions: Optimization of cervical cancer prevention programs requires stronger collaboration among key players and keep satisfied stakeholders while maintaining active communication with implementers and target groups.

Keywords: *Stakeholder analysis, Cervical Cancer Program, Screening*

INTRODUCTION

Cervical cancer remains one of the leading causes of death among women worldwide. Data from Global Cancer (GLOBOCAN) by the International Agency for Research on Cancer (IARC) in 2018 reported 18.1 million new cancer cases and 9.6 million cancer deaths globally. According to that report, cervical cancer ranks fourth in the category of most common cancers globally. In Indonesia, it is the second most common cancer in terms of incidence, with 32,469 new cases, and the third leading cause of cancer-related deaths. Cervical cancer in Indonesia increased to 36,633 cases (17.2%) with a mortality prevalence of 9% in 2020. One of the provinces in Indonesia with the highest number of cancer cases is Central Java, which holds the second-highest position with a prevalence of 2.1%. Breast and cervical cancers are among the cancers most frequently affecting women. Central Java is the second-highest province for cervical cancer cases. One regency experiencing a rise in cervical cancer cases within this province is Banyumas Regency. The number of cervical cancer sufferers increased in 2019, 2020, and 2021 to 213, 305, and 589 respectively. This forms one basis for the Banyumas government's efforts to control cervical cancer.

Banyumas Regency has undertaken various efforts for the early detection of cervical cancer, such as HPV immunization targeting school-aged children, and early detection (screening) through Visual Inspection with Acetic Acid (VIA) and Pap smears. In 2022, the VIA screening achievement rate in Banyumas Regency was 33.3%, declining to 5.5% in 2023. One of the health centers targeted by this program is Wangon I Health Center, which has shown fluctuating achievement rates for cervical cancer early detection via VIA: 0.4% in 2021, reaching 32.8% in 2022, but declining again to 6.6% in 2023[5].

A preliminary study revealed that Wangon I Health Center has several strategies or programs for cervical cancer early detection efforts, including VIA and Pap smear

screening, HPV immunization, and educational efforts. These efforts have involved collaboration with various parties or stakeholders and have designed early detection initiatives in various forms. However, one program, the cervical cancer early detection program, still has an achievement rate below the target (10% of Women of Reproductive Age annually), and cross-sectoral stakeholders have not participated in follow-up actions or recommendations based on program achievements. Efforts to improve program achievement can be made by optimizing the roles of involved stakeholders. The presence of stakeholders in a program plays a crucial role in supporting and enhancing program success while reducing problems[6]. Stakeholders are involved in designing, implementing, evaluating, and are key to program success[14]. Each stakeholder involved in a program has distinct characteristics reflecting their power to influence the policy process[11]. Therefore, stakeholder analysis for a program is essential.

Stakeholder analysis is conducted to inform decision-making. This process also identifies parties that can potentially support or hinder program success, enabling strategic approaches toward them. The analysis also determines when, how, and why stakeholders are or should be involved in a program[15]. The cervical cancer early detection program at Wangon I Health Center aims to achieve screening participation targets, with stakeholders being crucial components influencing the program. Therefore, a stakeholder analysis based on power and interest was conducted to assess stakeholder influence and to optimize stakeholder roles for program success. Previous research has not yet analyzed stakeholders involved in the cervical cancer early detection program at Wangon I Health Center, prompting this research titled "Analysis of Stakeholder Roles in Cervical Cancer Early Detection Efforts in the Working Area of Wangon I Health Center, Banyumas Regency".

METHODS

A qualitative case study design was employed. The study was conducted at Wangon I Community Health Center, Banyumas Regency, from October to December 2024. Informants consisted of the Head of CHC, MCH officer, Immunization officer, community health volunteer, community representative, PKK representative, and PLKB officer.

Data were collected through semi-structured interviews, observation, and document review. Power was operationalized as authority in decision-making, control over resources, and ability to mobilize actors. Interest was defined as the degree of involvement, responsibility, and expected benefit from program achievement.

Data analysis followed thematic analysis procedures including transcription, coding, categorization, theme development, and stakeholder mapping. Source triangulation and member checking were conducted. Ethical approval was obtained from the Faculty of Health Sciences Ethics Committee, Jenderal Soedirman University (No. 1623/EC/KEPK/X/2024).

RESULTS

The research on stakeholder analysis in cervical cancer early detection efforts in the working area of Wangon I Health Center was conducted from October to December 2024. Results showed that the cervical cancer program at Wangon Health Center consists of two main programs: screening (VIA or Pap smear) and HPV immunization. Efforts by Wangon I Health Center involve various stakeholders with their respective roles. Stakeholders involved in these efforts can be identified as key stakeholders (decision-makers and responsible parties), primary stakeholders (implementers or targets directly involved in the program), and secondary stakeholders (those supporting the program).

Table 1. Stakeholder Identification based on Key, Primary, and Secondary Roles

No.	Stakeholders	Category	Form of Involvement
1.	Health Office	Key Stakeholder	The Health Office formulates and determines cervical cancer policies in Banyumas Regency. It also supervises through activity achievement reports submitted by each health center.
2.	Head of Health Center	Key Stakeholder	The Head of the Health Center is responsible for the cervical cancer early detection program at Wangon I Health Center and is the legal decision-maker for

			the cervical cancer program.
3.	Maternal and Child (MCH) Health Program Officer	Key Stakeholder	The KIA Program Officer acts as the technical designer of the screening program, implementer, and is directly responsible to the head of the health center for program execution.
	Immunization Program Officer	Key Stakeholder	The Immunization Program Officer is directly involved as an implementer and designer of the HPV immunization program.
	Midwife	Primary Stakeholder	Village midwives provide education and information to the community about the cervical cancer early detection program and act as program implementers.
	Community	Primary Stakeholder	The community serves as beneficiaries and targets of the cervical cancer early detection program.
	Students	Primary Stakeholder	Students serve as beneficiaries and targets of the cervical cancer early detection program.
	Prodia Laboratory	Primary Stakeholder	The laboratory collaborates with the health center as a referral for Pap smear tests.
	Stakeholder	Category	Form of Involvement
	Health Office	Key Stakeholder	The Health Office formulates and determines cervical cancer policies in Banyumas Regency. It also supervises through activity achievement reports submitted by each health center.
	KB Program Officer	Secondary Stakeholder	The Family Planning (KB) Program Officer helps educate and direct patients to undergo cervical cancer screening.

	PLKB	Secondary Stakeholder	The PLKB, specifically the Pokja 4 PKK, supports the program by helping find screening participants through family planning patients directed for cervical cancer screening.
	Religious Figures (e.g., head of Muslim women's organization)	Secondary Stakeholder	This party helps provide understanding to its members and encourages early detection of cervical cancer.
Village Government	Secondary Stakeholder	This party helps provide understanding to its community and encourages early detection of cervical cancer through mobilizing the PKK.	Village Government
Sub-district Government	Secondary Stakeholder	This party supports the cervical cancer program at the sub-district level by organizing quarterly cross-sectoral meetings.	Sub-district Government

Table 1.16 shows stakeholders involving in the cervical cancer early detection program at Wangon I Health Center. Stakeholders classified as key are the Health Office, Head of Health Center, KIA Program Officer, and HPV Program Officer. Primary stakeholders are those directly involved with a positive or negative impact on the program, including midwives, the community, volunteers, students, and school principals. Secondary stakeholders are those not directly involved but concerned and supportive of the program, playing a supportive role by providing recommendations, criticism, and helping disseminate information. Parties in this group include the sub-district head, religious figures, the family planning program officer, PLKB, PKK, and community health volunteers.

Stakeholder roles were categorized using the power-interest grid theory by Mitchell, Agle, and Wood (1997). This theory divides power and interest levels to provide a clear framework for stakeholder communication and coordination18. Intensive communication in a program is important, especially for stakeholders closest to policymakers with significant program influence16. Each stakeholder involved in the cervical cancer program was classified into four groups: key players (high power, high interest), keep satisfied (high power, low interest), keep informed (low power, high interest), and minimal effort (low power, low interest). Based on interviews and supporting secondary data, the classification based on the power-interest grid is shown in the following figure:

Stakeholder	Power Indicator	Interest Indicator	Classification
Health Office	Policy authority, supervision	Program performance responsibility	Key Player
Head of CHC	Resource allocation	Target achievement responsibility	Key Player
MCH Officer	Program coordination	Daily implementation	Key Player
Immunization Officer	Technical authority	HPV program achievement	Key Player
Village Head	Community mobilization	Indirect involvement	Keep Satisfied
School Principal	Student mobilization	Limited program responsibility	Keep Satisfied
Midwives	Program implementation	High involvement	Keep Informed
Cadres/PKK/PLKB	Community education	High involvement	Keep Informed
Women of Reproductive Age	No formal authority	Variable participation	Minimal Effort

Figure 1. Operational Indicators Used for Stakeholder Mapping

The figure shows that there are parties with high power and high interest to influence the program, termed key players. Parties in this classification are the Health Office, Head of Health Center, HPV Program Officer, and KIA Program Officer. These key players shape policies, design technical activities, and influence other parties through coordination and cross-sectoral advocacy. Their interest in the cervical cancer program is very high as the head of the health center and program officers are responsible for achieving program

targets.

Keep satisfied stakeholders have high power but low interest. Parties in this role are the village head, school principal, religious figures, and sub-district head. The sub-district government has the power to hold quarterly cross-sectoral meetings. School principals, village heads, and religious figures can mobilize their constituents to participate in the program. However, these parties have low interest as they are not directly or primarily involved as program implementers, only providing support.

Keep informed stakeholders have high interest but low power. Parties in this role are community health volunteers, PKK, PLKB, midwives, the family planning program officer, and the Prodia laboratory. Midwives and the family planning program officer, as part of the health center, have high interest in achieving program success as implementers and educators. PLKB, PKK, and volunteers have high interest in ensuring their communities are free from cervical cancer and sometimes receive incentive benefits. The Prodia laboratory, as a private institution, has high interest in gaining financial profit and promotion from collaboration. However, these parties have low power as they are not directly involved in policy formulation. They act as program implementers.

Minimal effort stakeholders have low interest and low power concerning the program. Parties in this classification are the community and students. Their power is low as they are only program targets without decision-making authority. Their interest is said to be low due to diverse individual priorities, potentially leading to refusal or opposition. Some individuals may have high interest because they feel the program benefits their health, but many still consider it unimportant, evident from fear, shame, and lack of awareness.

The findings revealed that collaboration among stakeholders plays a crucial role in achieving cervical cancer screening targets. Informants emphasized that community mobilization and support from local leaders are essential for increasing participation in screening activities. According to the Maternal and Child Health (MCH) Officer, the success of the program is strongly influenced by the involvement of community-based stakeholders:

"Achievement of screening targets depends on support from village leaders and cadres." (MCH Officer)

Community health volunteers (cadres) were identified as important actors in disseminating information and encouraging women to participate in screening programs. One community health volunteer explained that their role includes actively inviting eligible women to attend screening services:

"We help invite women to participate in screening activities." (Community Health Volunteer)

Similarly, support from village authorities contributes to program implementation, particularly when health promotion and screening activities require community mobilization. A village representative stated that the village government generally provides assistance when requested by the health center:

"We usually support health programs when requested by the health center." (Village Representative)

These findings indicate that stakeholder engagement extends beyond the health sector and relies on collaboration between health workers, community volunteers, and local government representatives. The active participation of these stakeholders facilitates information dissemination, increases community awareness, and supports the achievement of cervical cancer screening targets.)

DISCUSSION

Key stakeholders (key players) hold primary authority in decision-making for cervical cancer prevention programs and are responsible for the program. The Health Office, Head of Health Center, KIA Program Officer, and HPV Immunization Program Officer fall into this group. This party is also tasked with coordinating and implementing health programs[13]. Key players are fundamental to increasing the success of planned program implementation[12]. Furthermore, for new policies or decisions, the involvement of key stakeholders is needed to ensure direction and responsibility for program sustainability[7]. As primary determinants of program direction, key players must be actively included in all program cycle stages and given equal opportunity to contribute[3]. Therefore, the health center, as a key player in determining the cervical cancer program, can do so by reviewing policies at other health centers and involving the community as beneficiaries to convey complaints and expectations, perhaps through health center social media (providing a suggestion column) or involving the community in program evaluation. Key player stakeholders must be carefully managed as they influence outcomes and ensure smooth processes[17].

The next stakeholder group is keep satisfied (high power-low interest). Stakeholders in this group have high power but low interest. Parties include the sub-district head, religious figures, school principal, and village head. These parties possess high power to influence the program, so their presence needs monitoring and good management to maximize their active role in achieving goals[4]. Important information must also be seriously conveyed and valued for this group[1]. To enhance program success, collaboration among keep satisfied stakeholders, especially cross-sectorally, is advisable. For example, collaborating with the education sector to hold cervical cancer educational activities in schools. Stakeholders in this group must be kept satisfied as they can influence program outcomes.

Low power-high interest or keep informed stakeholders have high interest but low power. They typically are not involved in policy formulation. Parties in this category include midwives, PLKB, community health volunteers, the family planning program officer, and PKK. These parties are important as implementers, educators, and aids in increasing program success. Health workers are also expected to demonstrate counseling and persuasive skills to attract community screening and accompany students through their fears[10]. Success improvement efforts can also be made by

collaborating with other activities, e.g., providing cervical cancer education during major health-related commemorative days, or through small meetings, chats with close contacts, or online media like WhatsApp, though selectivity is required[11].

- Stakeholders in the minimal effort (low power-low interest) category have low interest and low power in influencing the program. Their low interest leads to varied acceptance and potential refusal. Parties here are Women of Reproductive Age and students in the HPV immunization program. The community's role is important to cooperate in supporting the program[2]. However, based on findings, some refuse due to fear, shame, or lack of awareness. Therefore, attention is needed for this group as they determine program success. Although their interest and influence are suboptimal, their support is needed[9]. Active roles from this group are also crucial. Uninformed community members are expected to actively seek information from volunteers or others, or independently through social media, participating in socialization, and convincing themselves to undergo early detection for better health.

CONCLUSIONS

Stakeholders involved in cervical cancer early detection at Wangon I CHC have distinct roles and levels of influence. Effective program implementation requires engagement strategies tailored to each stakeholder category. Strengthening collaboration with village governments, schools, religious leaders, and community organizations may improve screening participation and program sustainability.

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REFERENCES

1. Adil A, Syarief R, Widiatmaka, Najib M. Stakeholder analysis and prioritization of sustainable organic farming management: a case study of Bogor, Indonesia. Sustainability. 2022 Dec 13;14(24):16706.
2. Ariyanto ED, Marom A. Analisis peran stakeholder dalam program pilah sampah di Kelurahan Mangkang Kulon, Kecamatan Tugu, Kota Semarang [Analysis of stakeholder roles in the waste sorting program in Mangkang Kulon Village, Tugu District, Semarang City]. Journal of Public Policy and Management Review. 2021 Apr 8;10(2):221-39.
3. Arrohmah M, Suryoputro A. The role of stakeholders in the provision of minimum service health care in Wonosobo Regency. Media Publikasi Promosi Kesehatan Indonesia (MPPKI). 2024 May 2;7(5):1274-80.
4. Baikhaqi M, Setiawan I, Febriadi H. Peran kepemimpinan pada kantor kecamatan paringin selatan Kabupaten Balangan. Jurnal Pelayanan Publik [The role of leadership at the Paringin Selatan sub-district office, Balangan Regency]. Journal of Public Services. 2024 Oct 25;1(3):795-802.
5. Dinas Kesehatan Kabupaten Banyumas. Profil Kesehatan Tahun 2023 [Health profile 2023]. Banyumas. Dinas Kesehatan Banyumas; 2023
6. Masrurun ZZ, Nastiti DM. Analisis stakeholders dalam pengembangan kawasan strategis pariwisata Kabupaten Wonosobo [Stakeholder analysis in the development of strategic tourism areas in Wonosobo Regency]. Jurnal Kepariwisataan Indonesia: Jurnal Penelitian Dan Pengembangan Kepariwisataan Indonesia. 2023 Jun 12;17(1):99-118.
7. Murthy VH. Confronting health worker burnout and well-being. New England Journal of Medicine. 2022 Aug 18;387(7):577-9.
8. Novalia V. Kanker Serviks [cervical cancer]. GALENICAL: Jurnal Kedokteran dan Kesehatan Mahasiswa Malikussaleh. 2023 Feb 1;2(1):45-56.
9. Nurmala I, Sari JD, Dewi DM, Devi YP. Analisis stakeholder untuk mendukung peran Banyuwangi Children Center dalam upaya menurunkan kekerasan seksual pada anak [Stakeholder analysis to support the role of the Banyuwangi Children Center in efforts to reduce sexual violence against children]. Buletin Penelitian Kesehatan. 2021;49(1):47-56.
10. Panjaitan S, Nababan D, Hutajulu J, Warouw SP, Sitorus ME, Silitonga EM. Deteksi dini kanker leher rahim dengan metode inspeksi visual asam asetat (iva) test (studi kualitatif pada pasien ca serviks di puskesmas sentoso baru kota medan) [Early detection of cervical cancer using the visual inspection with acetic acid (VIA) test method (qualitative study on cervical cancer patients at Sentoso Baru Health Center, Medan City)]. Jurnal Kesehatan Tambusai. 2024 Sep 27;5(3):10116-34.
11. Septian GD. Systematic Literature-Review: analisis komparasi media sosial dalam penyebaran informasi [Systematic Literature Review: comparative analysis of social media in the dissemination of information]. Jurnal JTIK (Jurnal Teknologi Informasi dan Komunikasi). 2024 Jul 1; 8(3):771-80.
12. Somani R, Muntaner C, Hillan E, Velonis AJ, Smith P. A systematic review: effectiveness of interventions to de-escalate workplace violence against nurses in healthcare settings. Safety And Health At Work. 2021 Sep 1; 12(3):289-95.
13. Wardhani L, Maesaroh M, Widowati N. Peran stakeholder dalam percepatan penurunan stunting di kelurahan Tanjung Mas Kota Semarang [The role of stakeholders in accelerating the reduction of stunting in Tanjung Mas sub-district, Semarang City]. Journal of

Public Policy and Management Review. 2023 Jul 3;12(3):725-40.
14. Yogopriyatno, J., & Hakim, K. Analisis stakeholders mapping dalam penanganan COVID-19 di Kota Bengkulu [Stakeholders mapping analysis in handling COVID-19 in Bengkulu City]. PESIRAH: Jurnal Administrasi Publik. 2023; 1(2). Https://doi.org/10.47753/pjap.v1i2.24
15. Nguyen TS, Mohamed S. Mediation Effect of Stakeholder Management between Stakeholder Characteristics and Project Performance. Journal of Engineering, Project & Production Management. 2021 May 1;11(2).
16. Sarungu CM. Stakeholder analysis using the vectorized salience model, enhanced power-interest grid, and stakeholder cube diagrams. Ultima Infosys: Jurnal Imu Sistem Informasi. 2024 Jun 3; 15 (1):35-41.
17. Watters ER. Assessing Stakeholder Power and Influence in the Law Enforcement Accreditation Process. Journal of Colorado Policing. 2022; 6 (2), 16-21.
18. Maqbool R, Rashid Y, Ashfaq S. Renewable energy project success: Internal versus external stakeholders' satisfaction and influences of power-interest matrix. Sustainable Development. 2022 Dec; 30(6):1542-61