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Research Article

The Role of Community Volunteers (Kader) as Human Capital in Enhancing the Effectiveness of Family Planning Program Services in Gondanglegi District

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Abstract. The Family Planning (FP) Program is one of the Indonesian government's efforts to improve family quality through birth control and reproductive health services. The success of this program is influenced by the quality of human resources, particularly community cadres who serve as frontline implementers at the community level. This study aims to analyze the role of cadres as human capital in improving the effectiveness of Family Planning Program services in Gondanglegi District. This research employed a qualitative approach using a case study design. Data were collected through in-depth interviews, observations, and documentation, and analyzed using the interactive model of Miles, Huberman, and Saldaña. The findings indicate that the role of cadres as human capital is supported by five key dimensions: knowledge, skills, experience, social capital, and commitment. These dimensions enable cadres to carry out education, mentoring, coordination, and community service activities, thereby contributing to the effectiveness of Family Planning Program services. The study highlights that strengthening cadres' capacity through continuous training and development is essential for supporting the successful implementation of the Family Planning Program.

Keywords: Capacity Building; Family Planning Cadres; Family Planning Program; Human Capital; Service Effectiveness.

1. Introduction

The Family Planning (KB) program is a strategic policy of the Indonesian government aimed at achieving sustainable population development by controlling birth rates, improving reproductive health, and enhancing the quality of families (Raidanti et al., 2026). Beyond limiting the number of children and regulating birth spacing, this program plays a strategic role in improving the population's quality of life (Suwardi et al., 2024). This is realized through the reduction of maternal and infant mortality rates, the improvement of general well-being, and the strengthening of family resilience (Fajriah et al., 2025). From the perspective of sustainable development, the success of the Family Planning program contributes directly to the attainment of the Sustainable Development Goals (SDGs) specifically the targets related to reducing the Maternal Mortality Ratio (MMR), improving reproductive health, and fostering high-quality families (Sundoro et al., 2023, Ghifari Arfananda et al., 2025). Nevertheless, indicators for maternal and child health in Indonesia still face significant challenges. Data from the Intercensal Population Survey (SUPAS) indicate that the Maternal Mortality Ratio (MMR) remains high, at 305 deaths per 100,000 live births a figure well above both national and SDG targets thereby necessitating a more effective strengthening of the Family Planning program's implementation strategies (Sundoro et al., 2023).

The family planning program is determined not only by the availability of healthcare services and contraceptives but also by the effective management of the human resources involved in its implementation (Fatra et al., 2025). Within the context of community-based public services, family planning volunteers (kader) serve as the spearhead of program execution, acting as a vital link between the government and the community. These volunteers perform various strategic functions ranging from identifying couples of reproductive age, providing counseling and reproductive health education, and supporting

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contraceptive users, to reporting on program outcomes. Such roles position these volunteers as key actors in building public trust, enhancing reproductive health literacy, and encouraging community participation in family planning initiatives (Ghifari Arfananda et al., 2025). Consequently, the success of family planning services is influenced not merely by the technical aspects of healthcare provision, but also by the quality of the human resources who carry out these services at the community level.

From the perspective of management science, kaders (community volunteers/facilitators) can be viewed as "human capital" a strategic organizational asset possessing the knowledge, skills, experience, and social capabilities necessary to generate added value for the organization (Crook et al., 2011). Human Capital Theory posits that investing in the enhancement of individual competencies through education, training, and capacity building eads to greater organizational productivity and effectiveness. In the public service sector, the concept of human capital extends beyond technical competence to encompass communication skills, community leadership, collaboration, problem-solving, and the ability to foster social relationships with the public. Consequently, the quality of these kaders as human capital serves as a critical factor in the effective implementation of family planning (KB) programs, particularly regarding the dissemination of information, the raising of public awareness, and the successful attainment of service targets.

Several previous studies indicate that the implementation of family planning (KB) programs continues to face various obstacles, such as low public participation, limited access to information regarding contraception, suboptimal outreach and socialization efforts, and a lack of service facilities and infrastructure (Purnawati et al., 2024, Janani & Arifin, 2024). Other research has focused more on the effectiveness of family planning programs from the perspectives of public policy, public health, and healthcare service delivery (Asdewi & Zamli, 2025, Sundoro et al., 2023). Nevertheless, studies that frame community health volunteers (kader) as "human capital" within the context of human resource management remain relatively limited. Most research positions these volunteers merely as technical implementers of the program, failing to examine how their competencies, experience, motivation, communication skills, social networks, and learning capacity contribute to the overall effectiveness of family planning services. This research gap highlights the need for a more comprehensive approach one that views these volunteers as strategic assets for public service organizations, capable of driving service excellence through competency-based human resource management.

Gondanglegi District is an area that actively implements family planning (KB) programs through collaboration among family planning field officers, healthcare personnel, village government officials, and community volunteers (cadres). Various activities such as identifying couples of reproductive age, providing counseling, offering contraceptive services, facilitating family-focused support groups, and integrating family planning services with posyandu (integrated healthcare post) activities are carried out on a regular basis. Nevertheless, the effectiveness of these services still faces several challenges, including suboptimal community participation, varying levels of acceptance toward different contraceptive methods, and limited intensity in public education efforts. More specifically, challenges regarding community acceptance of family planning programs stem from lingering fears particularly concerning the use of implants and intrauterine devices (IUDs) as well as the traditional belief that having many children brings greater prosperity. These conditions indicate that the success of the program depends not only on government policy but also on the capacity of the cadres to perform their roles in education, communication, guidance, and coordination with various stakeholders. In Gondanglegi District, there are 14 "Pembantu Pembina Keluarga Berencana Desa" (PPKBD) village-level family planning support cadres distributed across 14 villages, with each cadre overseeing a team of members. These cadres undergo monthly evaluations as part of an ongoing development process. This situation provides the context for examining how the capacity of these cadres is utilized to address social barriers and support the effectiveness of family planning services.

Based on the description above, this study aims to explore the role of community health volunteers (kader) as human capital in enhancing the effectiveness of Family Planning (FP) program services in Gondanglegi District. The novelty of this research lies in its application of a human capital perspective to understand how the knowledge, skills, experience, communication abilities, social networks, and commitment of these volunteers contribute to the effectiveness of FP services at the village level. This perspective frames the volunteers not merely as technical implementers of the program, but as human resource assets that play a vital role in building public trust and addressing the social and cultural barriers to the

acceptance of contraception. This study is expected to enrich the field of public sector Human Resource Management, particularly regarding the management and capacity development of community volunteers within the context of community-based public services.

2. Literature Review

The Concept of Human Capital

Human Capital Theory views individuals as strategic organizational assets possessing knowledge, skills, experience, abilities, creativity, and competencies that can enhance organizational productivity. Investing in the education, training, and capacity development of individuals leads to improved organizational performance, as human resources serve as the primary driver of value creation.

According to Becker (1993), human capital is the accumulation of competencies acquired through education, training, work experience, and continuous learning, which enhances the productivity of both individuals and organizations. In the context of public sector organizations, human capital serves as a strategic factor, as the quality of public services is heavily influenced by the quality of the human resources who interact directly with the public. Therefore, organizations must systematically develop individual competencies to ensure the delivery of services that are effective, adaptive, and oriented toward the needs of the public.

Beyond the aspect of technical competence, the modern concept of human capital also emphasizes the importance of communication, collaboration, leadership, innovation, and continuous learning as sources of organizational advantage. Individuals with high human capital are capable of creating added value through improved service quality, effective problem-solving, and the ability to build strong relationships with stakeholders (Crook et al., 2011;Wright & McMahan, 2011).

The Family Planning Program as a Public Service

The Family Planning Program is a national policy aimed at fostering high-quality families by managing the number and spacing of births, improving reproductive health, and controlling population growth (Prabowo et al., 2024). This program contributes to enhancing family well-being, reducing maternal and infant mortality rates, and achieving sustainable development goals. As an implementation of public service, the Family Planning Program requires collaboration among the government, healthcare professionals, village authorities, and the community. From the perspective of public administration, Denhardt & Denhardt, 2000 through their "New Public Service" theory emphasize that public services must be oriented toward the needs and interests of the public. In the context of the Family Planning Program, this principle is realized by providing accessible information, guidance, and services tailored to the community's needs. The execution of the program also relies on the role of community volunteers (cadres), who serve as a bridge between the government and the public, ensuring that services are delivered effectively.

The Role of Cadres as Human Capital

Community health volunteers known as kader are community-based volunteers who assist the government in delivering health services and fostering community empowerment. From a human resource management perspective, these volunteers serve not merely as technical implementers but also as human capital, bridging the gap between the organization and the community through the dissemination of information, education, guidance, and the shaping of health-related behaviors. Their local knowledge, social experience, community networks, and communication skills constitute a strategic asset that enhances the effective implementation of health policies (Ogutu et al., 2021).

However, individual capacity cannot fully explain the role of kader (community volunteers) within society. The execution of their duties is also linked to the social relationships they possess including their closeness to residents, the trust placed in them by the community, and their working relationships with family planning field workers and healthcare personnel. These aspects can be understood through the concept of "social capital." Coleman, (1988) defines social capital by the function of social relationships in facilitating individual action, while Putnam (1993) highlights the importance of social networks and norms in supporting coordination and cooperation.

In this study, human capital and social capital are positioned as two distinct yet complementary concepts. Human capital refers to the capacities inherent in individual community workers (kaders), while social capital relates to resources that can be accessed or leveraged through social relationships, networks, and trust. Community workers who possess

knowledge and skills are able to convey information to the public, while strong social relationships facilitate the processes of communication and coordination. Therefore, these two concepts are employed to understand how individual capacities and social relationships support the implementation of the Family Planning (KB) Program in Gondanglegi District.

Effectiveness of Family Planning Program Services

Service effectiveness refers to an organization's level of success in achieving its service goals in a targeted, high-quality, and efficient manner, while effectively meeting the needs of the community. In the context of family planning services, effectiveness is measured not only by an increase in the number of acceptors, but also by the quality of counseling, ease of access to services, public satisfaction, the accuracy of targeting, and the sustainability of the services provided.

In the context of the Family Planning (KB) Program, the effectiveness of services can be assessed through the implementation of education, guidance, coordination, and support for public access to contraceptive services. Education pertains to the dissemination of information regarding family planning and contraceptive methods. Guidance relates to the assistance provided to the community in accessing services. Coordination encompasses the exchange of information and the discussion of challenges between community health volunteers (kader) and relevant stakeholders, while support for service access concerns the role of these volunteers in connecting the community with authorized healthcare professionals.

The SERVQUAL model can serve as a conceptual framework for explaining the dimensions of service quality namely reliability, responsiveness, assurance, empathy, and tangibles which contribute to public perceptions of service quality. In the context of family planning programs, the effectiveness of services is also influenced by the competence of personnel, cross-sectoral coordination, and the ability of community volunteers (kaders) to provide education and support to the public.

Human Capital of Community Volunteers (Kader) and the Effectiveness of Family Planning Services

Human Capital Theory posits that individuals possessing high levels of competence, knowledge, experience, and interpersonal skills contribute to enhanced organizational effectiveness (Becker, 1993). In the context of family planning (FP) services, community volunteers or "cadres" with strong human capital are better equipped to convey accurate information, build public trust, provide effective guidance, and increase the participation of couples of reproductive age in utilizing FP services. Consequently, investing in the capacity development of these cadres is expected to improve service quality, expand program reach, and support the achievement of family planning service targets (Devitasari et al., 2026). Various studies indicate that human resource competence and capacity are positively correlated with the quality of public services and the successful implementation of health programs (Crook et al., 2011; Wright & McMahan, 2011). Therefore, these cadres, as human capital, should be viewed as strategic assets that play a vital role in ensuring the effectiveness of community-based services.

Beyond human capital, the effectiveness of family planning (KB) services is also linked to social capital, which encompasses social networks and trust among community health volunteers (kaders), the broader community, and other relevant stakeholders. Social capital facilitates communication, the exchange of information, and collaboration in the implementation of programs (Coleman, 1988; Putnam, 1993). Thus, human capital and social capital play complementary roles. Human capital pertains to the individual capacity of the volunteers, while social capital supports the application of that capacity through social relationships and coordination with the community and healthcare personnel.

Given this relationship, the capacity of community health volunteers (kader) can support the effectiveness of family planning (FP) services through activities such as education, guidance, coordination, and the dissemination of information regarding available services. Consequently, these volunteers as a form of human capital should be positioned as a strategic element in supporting community-based family planning services. Their contributions must be analyzed based on the execution of their duties and field observations; however, one should not conclude that there has been an increase in the number of FP participants or the use of specific contraceptive methods unless such claims are supported by sufficient empirical data.

3. Proposed Method

This study employs a qualitative approach with a case study design to explore in depth the role of kader (community health volunteers) as human capital in enhancing the effectiveness of Family Planning (KB) program services in Gondanglegi District. A qualitative approach was selected for its capacity to provide a comprehensive understanding of the experiences, perceptions, and practices of these volunteers in carrying out their service functions within the community. Unlike quantitative research, which focuses on testing relationships between variables, qualitative research aims to uncover the meanings, processes, and social dynamics underlying a phenomenon from the perspectives of the participants (Creswell, W John, 2018). Consequently, this approach is considered appropriate for understanding how the competencies, experience, communication skills, social networks, and commitment of these volunteers as human capital contribute to the effectiveness of Family Planning program services.

The research was conducted in Gondanglegi District, Malang Regency, which was purposively selected as it is an area where the Family Planning Program is implemented with the active involvement of "Pembantu Pembina Keluarga Berencana Desa" (PPKBD) or Village-Level Family Planning Assistants in every village. This area possesses characteristics highly relevant to the research focus, as these assistants do not merely perform administrative tasks; they also serve as educators, facilitators, mediators, and community guides in the execution of the Family Planning Program. Such conditions allow the researcher to obtain an empirical overview of how the human capital capacity of these assistants supports the effectiveness of public services at the community level.

The selection of informants for this study employed a purposive sampling technique, in which participants were intentionally chosen based on specific criteria relevant to the research requirements (Patton, 2015). The primary informants consisted of Village Family Planning Assistant (PPKBD) cadres who are actively involved in the implementation of the Family Planning (KB) Program, while the supporting informants included family planning extension workers, village midwives, and couples of reproductive age who are recipients of these services. The inclusion criteria for informants required direct involvement in the implementation or receipt of Family Planning Program services, possession of experience and knowledge relevant to the research focus, and a willingness to participate voluntarily. Conversely, the exclusion criteria encompassed individuals who were not directly involved in the program, lacked relevant information, or were unwilling to participate in the study. A total of nine individuals were interviewed, comprising three PPKBD cadres, one family planning extension worker, two village midwives, and three couples of reproductive age. Selecting informants from these diverse groups was intended to provide a comprehensive understanding of the role of cadres as human capital in supporting the effectiveness of the Family Planning Program from various perspectives.

The data collection process was carried out using three primary approaches: in-depth interviews, participant observation, and document review. Interviews were used to explore the experiences of kader (community health volunteers) regarding their competencies, training, communication, coordination, problem-solving skills, and the service strategies they implement within the community. Observations focused on the activities of these volunteers, including health education, data collection, providing support to family planning (KB) acceptors, and coordinating with healthcare professionals. Meanwhile, the document review encompassed activity reports, data on family planning program participants, records related to the training and development of volunteers, and policy archives concerning the implementation of the Family Planning Program in Gondanglegi District. Data collection began with the selection of informants based on specific research criteria, followed by the development of an interview guide tailored to the study's focus. Interviews utilized open-ended questions to elicit insights into the volunteers' experiences, competencies, communication, coordination, and the challenges they encounter while providing family planning services. Observations involved monitoring the volunteers' activities, their interactions with the community, and their coordination with relevant stakeholders, with all observations systematically recorded. The document review involved examining pertinent materials to supplement and cross-reference the information gathered through interviews and observations. Finally, all data were organized according to their source and type to facilitate the analysis process.

Data analysis was conducted interactively using the model developed by Miles, Huberman, and Saldaña (2014), which encompasses data condensation, data display, and conclusion drawing and verification. Data collection took place concurrently with the analysis process. Data condensation involved selecting, focusing, and categorizing information derived from interviews, observation notes, and documentation based on research themes such as knowledge, skills, experience, commitment, social networks, and service effectiveness. Subsequently, the data were presented through narrative descriptions and thematic groupings to identify patterns, similarities, differences, and interconnections among the findings. Conclusions were drawn by interpreting the identified patterns and linking them to the research focus and theoretical framework. Verification was carried out iteratively by assessing the alignment of interpretations with the available data and cross-referencing information from various sources.

Data validity is maintained through source triangulation, technique triangulation, and member checking. Source triangulation is carried out by comparing information from PPKBD (Village Family Planning Coordinating Post) cadres, family planning field workers, village midwives, and couples of reproductive age. Technique triangulation involves cross-checking the consistency of information obtained through interviews, observations, and documentation. Meanwhile, member checking is conducted by re-confirming summaries of information or interpretations of interview results with the informants to ensure they align with the statements originally provided. If any discrepancies in the information are identified, the researcher re-examines the available data before establishing the final interpretations and research conclusions.

4. Results and Discussion

Knowledge of Community Volunteers (Kader) as Human Capital in Family Planning Program Planning

The research findings indicate that the knowledge held by community health volunteers (kader) regarding the Family Planning (KB) Program serves as a form of human capital that supports the planning and implementation of the program in Gondanglegi District. This knowledge is acquired through various channels, including guidance, training, and the experience gained while performing their duties as volunteers. Such knowledge equips these volunteers to understand information about contraceptive methods, as well as to identify the needs and challenges faced by the community in participating in the Family Planning Program.

In practice, community volunteers (kaders) are involved in registering couples of reproductive age, providing information on contraceptive methods, and explaining the benefits and potential side effects of contraception. They also play a role in identifying the needs and challenges faced by the community regarding family planning services. These activities demonstrate that the knowledge possessed by these volunteers is not merely used for disseminating information; it also helps them understand the circumstances of the community members targeted by the program. Consequently, this knowledge serves as a foundation for the volunteers to carry out their educational functions and to identify issues that require further follow-up.

The contribution of the knowledge possessed by community volunteers (kader) is also evident in their involvement in relaying information to family planning counselors or midwives, as well as participating in deliberations or program planning. Information gathered through data collection and interactions with the community is discussed during meetings or planning processes involving relevant stakeholders. This demonstrates that these volunteers act as a bridge between the actual conditions within the community and those responsible for program planning. Such information serves as a valuable input for identifying service needs and determining activities that are relevant to the community's circumstances.

From the perspective of Human Capital Theory, knowledge is an organizational asset capable of enhancing the quality of decision-making and the effectiveness of service delivery (Becker, 1993). The higher the quality of knowledge possessed by personnel (cadres), the more accurate the information provided to the organization, thereby ensuring that program planning becomes more responsive to the needs of the community. This finding reinforces research by Crook et al., (2011), which posits that the quality of human capital has a positive relationship with improved organizational performance through the utilization of individual knowledge and competencies.

Based on these findings, the knowledge possessed by community health volunteers (kader) can be understood as an asset that supports the implementation of the Family Planning (KB) Program in Gondanglegi District. Such knowledge not only assists these volunteers in conducting educational activities but also facilitates the gathering of information regarding community needs during the program planning process. Therefore, continuous guidance and ongoing learning are essential to maintain and further develop the volunteers' knowledge, ensuring that the implementation of Family Planning activities remains well-aligned with the needs of the community.

Competence and Skills of Community Health Volunteers in Enhancing the Effectiveness of Family Planning Services

Research indicates that the competence of community health volunteers (kader) is reflected not only in their administrative abilities but also in their skills in communication, education, counseling, and community support. These volunteers actively conduct outreach during "posyandu" (integrated healthcare post) activities, home visits, and community group meetings, while also providing consultations on the selection of contraceptive methods tailored to the specific circumstances of couples of reproductive age.

Interpersonal communication skills are among the most prominent competencies. Community health volunteers are able to convey information using language that is easy to understand, which encourages community members to be more open about discussing reproductive health issues or concerns regarding the use of contraceptives. Furthermore, these volunteers act as mediators between the community and healthcare professionals, thereby facilitating easier access to family planning services.

These findings indicate that the competence of community volunteers (kader) represents a form of human capital investment that generates added value for public service organizations. According to Wright & McMahan, (2011), individual competence serves as a source of organizational advantage, as it determines the quality of service received by service users. Therefore, enhancing competence through continuous training and guidance is a crucial strategy for improving the effectiveness of the Family Planning (KB) Program.

The Experience and Social Networks of Community Workers as Enablers for Family Planning Program Implementation

The experience that community volunteers (kaders) gain while carrying out their duties constitutes a form of human capital, as it enables them to understand the characteristics of the local population, identify obstacles to the use of contraceptives, and tailor their communication approaches to the specific circumstances of the residents. Such experience can effectively support the implementation of programs, given that these volunteers possess insights derived from their direct involvement in data collection, the dissemination of information, and the provision of support to the community.

The research findings indicate that the experience of serving as a community volunteer (kader) fosters better adaptability when engaging with a diverse population. Volunteers with longer tenures possess a deeper understanding of the community's socio-cultural conditions, enabling them to determine appropriate communication approaches for providing education on the Family Planning (KB) Program.

In addition to experience, the social embeddedness of the community workers (cadres) further strengthens the effectiveness of their services. An emotional closeness to the community fosters mutual trust, making the processes of outreach, education, and support more effective. This trust enables the cadres to more easily identify the community's needs while also increasing the acceptance of information regarding reproductive health.

The Resource-Based View perspective posits that resources which are difficult to replicate such as experience and social relationships can generate organizational advantage (J. Barney, 1991). In this context, the experience of community health volunteers (cadres) constitutes a form of human capital that enhances their ability to understand the characteristics of the community and determine appropriate service approaches. Meanwhile, the social networks and trust established between these volunteers and the community represent a form of social capital that complements their individual capacities. Together, these elements interact to support the implementation of education, guidance, and coordination for family planning (KB) programs at the community level.

The Commitment of Cadres as Drivers of Effectiveness in Family Planning Program Services

Research has found that the commitment of community volunteers (kader) is a crucial factor in sustaining family planning services in Gondanglegi District. Although most of these volunteers serve without pay, they consistently demonstrate a high sense of responsibility in

carrying out tasks such as data collection, public outreach, providing support to family planning acceptors, submitting reports, and attending regular monthly evaluation meetings. Beyond their service-related roles, these volunteers also actively coordinate with family planning field officers, village midwives, and local village authorities to address various challenges encountered during the implementation of the program (Fatimah et al., 2026).

The commitment of the cadres is also reflected in the mandatory monthly evaluation sessions. Based on direct observation of these evaluations, every cadre has the opportunity to voice concerns and challenges encountered while carrying out their duties. One such challenge discussed is resistance to the use of contraception specifically, instances where a woman is willing to participate in a family planning program but fails to obtain her husband's consent. Such issues are then addressed collectively by the participants of the evaluation to identify potential solutions. This process demonstrates that the monthly evaluation serves not merely as a means for reporting activities, but also as a coordination forum for discussing obstacles and collaboratively determining how to handle them.

The findings indicate that the commitment of the kader (community volunteers) is demonstrated through the sustained execution of their duties, a willingness to support the community, and active involvement in evaluating and addressing challenges encountered in the field. From a human capital perspective, this commitment fosters the continued application of the knowledge and skills that *kader* possess in carrying out their responsibilities. Furthermore, the collaborative process of discussing issues and seeking solutions highlights the importance of coordination between the kader and relevant stakeholders in supporting the implementation of the Family Planning (KB) Program.

From the perspective of Strategic Human Resource Management, individual commitment is a key determinant of organizational success, as it influences the quality of service and the achievement of organizational goals (Wright & McMahan, 2011). Consequently, the commitment of cadres serves as a strategic asset that supports the effectiveness of Family Planning (KB) program services.

Contribution of Cadre Human Capital to the Effectiveness of Family Planning Program Services

The research findings indicate that the effectiveness of family planning (KB) services in Gondanglegi District is influenced not only by the availability of facilities and government policies but also by the quality of the human capital of the program volunteers (kader). The knowledge, competence, experience, social networks, and commitment of these volunteers shape the organization's capacity to provide services that are responsive, easily accessible, and aligned with the needs of the community.

An increase in the number of active family planning participants, broader utilization of long-acting contraceptive methods, and growing awareness among some couples of reproductive age serve as indicators that the human capital capacity of community health volunteers contributes to the effectiveness of services. Nevertheless, research also identifies several obstacles, including a lack of awareness among certain segments of the population, the persistent cultural belief that "more children bring more fortune," and concerns regarding the side effects of contraceptives. These conditions demonstrate that service effectiveness remains influenced by external factors, necessitating more intensive strategies for communication and community empowerment.

Regarding the aspect of support, the involvement of community health volunteers (kader) is evident in their home visits to residents and their assistance to individuals undergoing IUD insertion. Field observations indicate that these volunteers accompany participants throughout the service process and provide post-insertion support, consistent with their designated roles. This demonstrates that the support provided by these volunteers extends beyond the mere dissemination of information; it also encompasses active involvement in helping community members access family planning services. Furthermore, the participation of these volunteers in "Posyandu" (integrated healthcare post) activities serves as a form of community-based service, facilitating direct interaction with local residents.

The contribution of community health volunteers (cadres) is also evident in their coordination efforts through monthly evaluations. During these sessions, the volunteers share the challenges and issues they encounter in the field, which are then discussed collectively to find solutions. One such challenge is the opposition from husbands toward the use of contraception, even when their wives are willing to participate in family planning programs. This highlights that the implementation of the program depends not only on the availability of information and services but also on the family's acceptance of contraceptive use. Through

these joint evaluations, such obstacles can be identified and taken into account when determining the next steps.

These findings reinforce Human Capital Theory, which posits that organizations capable of developing individual competencies will achieve superior organizational performance (Becker, 1993). In the context of the Family Planning (KB) Program, community volunteers (kader) are not merely technical implementers; rather, they serve as strategic assets for public service organizations, creating value through knowledge transfer, community empowerment, and the enhancement of service quality.

Based on the research findings above, human capital can be conceptualized through five interrelated dimensions: (1) knowledge, (2) competencies and skills, (3) experience, (4) social networks (social capital embedded in human capital), and (5) commitment. These five dimensions interact to shape service quality by enhancing communication, education, mentoring, cross-sectoral coordination, and community participation. This model demonstrates that investing in the capacity development of community volunteers—through training, guidance, supervision, and continuous learning—serves as a human resource management strategy capable of sustainably improving the effectiveness of Family Planning Program services.

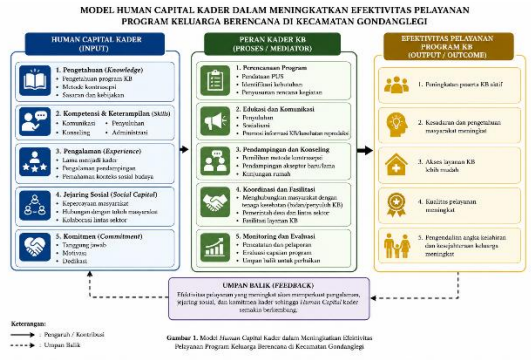


Figure 1. Model Human Capital

5. Conclusion

This study indicates that "Pembantu Pembina Keluarga Berencana Desa" (PPKBD) or Village Family Planning Support Cadres in Gondanglegi District play a role in enhancing the effectiveness of Family Planning (KB) services through their knowledge, competence and skills, experience, social networks, and commitment. Knowledge serves as the foundation for registering couples of reproductive age and disseminating information about contraception, while communication competence supports community education and outreach efforts. Experience enables cadres to better understand the characteristics of local residents and the challenges they face, and their commitment is reflected in the consistent execution of their duties and their participation in monthly evaluations. Furthermore, social networks and community trust components of social capital bolster the individual capacity of these cadres by facilitating communication and coordination with the community, family planning extension workers, and village midwives. Nevertheless, the delivery of these services still encounters social and cultural barriers, such as concerns regarding the side effects of contraceptives, the belief that having many children brings greater prosperity, and opposition from husbands toward the use of contraception. In summary, the contributions of these cadres are primarily evident in the areas of education, outreach, data collection, and service coordination. As this study did not employ quantitative measurements, it cannot determine the specific extent to which each of these dimensions influences improvements in program outcomes.

In practical terms, the research findings highlight the need for capacity building among community volunteers (kader) as part of the human resource management strategy for the Family Planning (KB) Program. Local governments, family planning extension workers, and healthcare facilities are advised to conduct periodic training sessions focused on communication, the dissemination of information regarding contraceptives, and support skills all within the scope of the volunteers' authorized roles. Ongoing guidance and supervision should also be provided, utilizing monthly evaluations as opportunities for learning and addressing challenges encountered in the field. Furthermore, experienced volunteers could be engaged to mentor new recruits, while coordination with village authorities, community leaders, and religious figures should be strengthened to help overcome socio-cultural barriers.

Providing appropriate recognition or incentives could also be considered to sustain the motivation and commitment of these volunteers in carrying out their duties.

This study has limitations, as it was conducted in a single sub-district using a qualitative case study approach and involved nine informants including three PPKBD (Family Planning Field Worker/Volunteer) cadres out of the 14 present in the study area. Consequently, the research findings provide a contextual understanding and are not intended to be generalized to other regions. Furthermore, service effectiveness was assessed through interviews, observations, and documentation, without quantitative measurements that would allow for the testing of relationships between human capital dimensions and program outcomes. Future research should incorporate a more diverse range of locations and informants, and employ mixed-methods or quantitative approaches to examine the relationship between cadre capacity and indicators of service effectiveness. Subsequent studies could also further explore the interplay between human capital and social capital in supporting community-based family planning services.

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