

GERMAS TOOL TO SUPPORT THE TRANSFORMATION OF HEALTH SERVICES IN INDONESIA: PERSPECTIVES OF HEALTH WORKERS

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Abstract

Community Movement for Healthy Living (GERMAS) is a government program that promotes healthy living in Indonesia. This study seeks to investigate the perspective of primary care health professionals on the development of GERMAS tools in order to facilitate the transformation of health services. The research utilized a qualitative design and Rapid Assessment Procedures approach, collecting data through focus group discussions in Sleman Regency in 2023. Further we analyze GERMAS activities, strengths and weaknesses, instrument development, and challenges. Result showed that according to health worker perspectives the implementation of GERMAS is crucial for improving public health in communities. However, barriers include limited funding, uneven distribution of efforts, and lack of role models. Digital literacy is needed to address these issues, including knowledge, disease history, prevention, and access to consultations with health providers. This literacy should be accessible, easy to understand, and small in size to avoid consuming large storage device data. So we conclude that health provider need a comprehensive GERMAS tool to support and controlling the implementation of GERMAS to increase health prevention and promotion.

Keywords: GERMAS, Tool, Development, Health Provider

1. INTRODUCTION

Community Movement for Healthy Living (GERMAS) is a program by the Government of Indonesia that aims to encourage the Indonesian population to live healthy and adopt healthy lifestyles. GERMAS has been regulated under Presidential Instruction Number 1 in 2017 which aims to improve community awareness to implement healthy lifestyles, reduce non-communicable diseases (e.g., type 2 diabetes mellitus, hypertension, obesity), enhance the quality of life of the community, and improve community productivity and the quality of human resources. Such efforts include improving physical activity, healthy lifestyles, provision of healthy food, accelerating nutrition improvements, preventing and early detection of diseases, enhancing the quality of environmental aspects, and educating healthy lifestyles [1].

Since 1990, Indonesia has experienced an epidemiological transition, in which non-communicable diseases have become very prevalent compared to communicable diseases and have even increased nearly three times in the last 30 years [2]. According to the 2018 Riskesdas, several health problems can disrupt the nation's development, such as the high prevalence of diabetes mellitus, hypertension, stroke, kidney disease, heart disease, and cancer [3]. The prevalence of non-communicable diseases tends to increase from 2013 to 2018: diabetes mellitus increased from 1.5% to 2%, stroke from 7% to 10.9%, kidney disease from 2% to 3.8% and hypertension increased from 25.8 % to 34.1%[3], [4]. These diseases require high treatment costs and return to health services repeatedly, thus burdening the country through large health insurance expenditures. The high prevalence of this disease is

associated with several risks of non-communicable diseases such as lack of physical activity (26.1%), insufficient consumption of fruits and vegetables (93.5%) [3], prolonged sitting, and insufficient sleep [5]. During the COVID-19 pandemic, the implementation of GERMAS was urgently needed to prevent transmission, improve or promote individual and population health, and maintain a clean and healthy lifestyle [6].

The Government of Indonesia has made efforts through several policies to support the implementation of GERMAS, either through presidential instructions or governor, regent and mayor regulations. Presidential Instruction Number 1 in 2021 about GERMAS states that the implementation of GERMAS involves all ministries, institutions, regional apparatus organizations, educational institutions, and the community. For example, the Minister of Health carried out the campaign for the Healthy Living Community Movement, increased advocacy and development of regions in the implementation of the Non-Smoking Area (NSA) policy, increased education on balanced nutrition and exclusive breastfeeding, as well as physical activity, increased the implementation of early disease detection in Community Health Centers and develop guidelines for the implementation of early disease detection in government and private institutions.

Meanwhile, provincial regional leaders or governors prepare and stipulate regional policies needed for GERMAS implementation in their area, facilitate, coordinate, monitor, evaluate, and report it to the Minister of Home Affairs. Regents/mayors provide and develop physical activity facilities, public green open spaces, motorized vehicle-free areas, bicycle paths, and pedestrian paths that are representative and safe; carrying out activities of utilizing the yard for growing vegetables and fruit, implementing NSA policies, carrying out activities that support GERMAS based on regional policies, and reporting GERMAS implementation to the Governor. Meanwhile, the Minister of National Development Planning/Head of the National Development Planning Agency coordinates planning for GERMAS, prepares implementation guidelines and indicators for the success of GERMAS, and conducts monitoring and evaluation [1].

Previous research has succeeded in involving communities in the implementation of GERMAS, including research on behavior change communication through GERMAS goes to school [7], development of m-health GERMAS [8], implementation of healthy lifestyles in elementary schools [9], early detection of non-communicable diseases [10], smoking cessation therapy interventions [11], as well as surveys examining the implementation of GERMAS in various setting areas and populations [12], [13], [6], [14]. Some studies found that interventions to change GERMAS behavior by using digital technology are an urgent need. This need is to support the transformation of health services effectively and efficiently, bridge health inequities, save human resources, solve problems in low-resource setting areas, and achieve optimal efficacy [15][16]. However, there are several limitations in previous research, including the digital health that was developed was partial so that individuals had to log in repeatedly to get access to different GERMAS aspects, the technology required large device storage and was deemed time inefficient. The development of comprehensive digital health tools for GERMAS needs to be carried out to fill the gaps in existing tools to support the transformation of primary services in the field of health promotion and prevention effectively and efficiently. This research aims to explore the perspective of health workers at the primary health center level regarding GERMAS tool development in order to support the transformation of health services.

2. METHODS

This research used a qualitative design with a Rapid Assessment Procedures approach. Data was collected through focus group discussions (FGD) in Sleman Regency in 2023. There were nine informants including the Head of the Health Department and all heads of primary health centers in the Sleman. Aspects observed included the GERMAS activities that had been implemented, the strengths and weaknesses, the need for instrument development to support the transformation of health services, and the challenges. The researcher acted as the facilitator, while coding and data analysis were carried out by the researcher and the team. We used FGD guides and recorders. Data was analyzed manually based on themes and sub-themes.

This research was ethically approved by the institutional review board at STIKES Guna Bangsa Yogyakarta Number 046/KEPK/VIII/2023 and research permission from the Head of Health Department Office of Sleman Number 070/6833 on 22 June 2023.

3. RESULTS

3.1 Focus group discussion

We carried out FGD in a closed room with a comfortable and quiet atmosphere, without any distracting sounds. Participants were seated in a U-shape seating formation, enabling eye contact among participants. The FGD lasted around 90 minutes.

3.2 Characteristics of the informants

Nine informants actively participated in FGD. Most informants completed an undergraduate degree and were female. Table 1 presents the detailed characteristics of the informants.

Table 1: Characteristics of the Informants

Characteristics	n
Age (years)	
30-40	3
>40	6
Sex	
Male	3
Female	6
Level of education	
Undergraduate degree	6
Graduate degree	3
Institution	
Primary health center	8
Department of Health	1

3.3 GERMAS implementation

Several themes emerged from FGD in the present study, including GERMAS activities, facilitators, barriers, implementation, and the need for digital tool development.

a) Activities or efforts within GERMAS

Germas is important in improving the public health status of the community. The government must facilitate these efforts both at the central and regional government levels so that people understand and have an awareness of the importance of maintaining health through disease prevention.

Below are statements from our informants:

“Through GERMAS, the community is also responsible for their own health.” (Mr R)

“We conduct posyandu (an integrated health service post) regularly, monthly early detection, and weekly exercise. The community can participate without any charge.” (Mrs J)

“Training for community health workers at posbindu (an integrated health service post for non-communicable disease) is one of our efforts. And all posbindu is supervised by the local primary health center. Meanwhile, the village provides its facilities, such as the instructor fee for exercise, provision of anthropometric kits, and materials for the blood sugar check.” (Mr N)

“The car-free day program at the district center every Sunday, prohibition of smoking at certain locations, exclusive breastfeeding, posbindu, and exercise together every Sunday for free at the district center.” (Mrs. U)

b) Facilitators of GERMAS

GERMAS are supported by Presidential Instruction Number 1 in 2017 and Minister of National Development Planning/BAPPENAS Regulation Number 11 in 2017 concerning general guidelines for GERMAS implementation and regional regulations. In the Yogyakarta Special Region, GERMAS is regulated under the Governor Regulation Number 44 in 2017 concerning the Action Plan for the Healthy and Sustainable GERMAS in Yogyakarta Region. Meanwhile, at the Sleman Regency government level, the GERMAS policy is regulated in regional government regulation No.6.9/Kep.KDH/A/2018. In 2021, the Regent of Sleman issued instruction Number 35 concerning GERMAS, and then Sleman Regent Circular Number 002 in 2022 concerning GERMAS civilization. In 2023, Sleman Regency Regent Regulation Number 8 of 2023 was issued concerning the Healthy Living Community Movement.

Below are illustrative quotes from our informants:

“Policies around GERMAS are very comprehensive, including Presidential Instruction, then regulations at the provincial level, then translated into the district level.” (Mr. K)

“There are several regulations as the basis of GERMAS implementation and we have implemented it for a long time although the program got stuck during the (COVID-19) pandemic... now the program is active.” (Mrs. Y)

All resources have been utilized including health promotion programs, training for community health workers at *posbindu*, and provision of GERMAS-related tools and facilities.

“For posbindu, institutions within the primary health center’s working areas have budgets, and GERMAS activities are reported regularly to their head of institutions as part of the monitoring and evaluation.” (Mrs T)

Good social capital, continued GERMAS socialization through posters, banners, and others. However, comprehensive digital literacy has not been developed. Thus, there is an urgent need for the development of digital literacy.

c) Barriers to GERMAS

Generally, there were several barriers to GERMAS implementation, such as limited and uneven funding, where some primary health centers and the village governments did not have sufficient funds. Apart from that, efforts to implement GERMAS were not evenly distributed in terms of activity type and intensity in several areas. Another barrier included no role models in GERMAS implementation.

Some community figures who should have been role models remained to smoke, making their followers also do such behavior.

Below are illustrative quotes from informants:

Community participation in some areas is low, their understanding is also low.

Disease prevention efforts are not popular among the community, they will visit health facilities when they are already sick.

"We have socialized GERMAS (to the community), but not all public figures can be role models to implement GERMAS... for example smoking." (Mrs. D)

"So far, GERMAS tend to increase the knowledge... but how to implement it and the attitudes of the community itself are not as expected." (Mr. M)

d) The need for GERMAS digital tool development

All informants agreed that digital literacy for the community was needed with literacy components regarding knowledge, disease history, prevention and access to consultations with health providers. They also thought that literacy needs to be informed with pictures or videos so that people can easily understand, easy to download and use, easy to access and small in size so that it does not consume large storage device data.

Below are the statements of our informants:

"Nowadays, there is a need for comprehensive digital literacy, not only related to knowledge..." (Mr. R)

"Very needed... almost all people use mobile phones so it can be more accessible to all community groups." (Mr. M)

All informants also stated that GERMAS digital literacy can support the transformation of health services, especially in primary care so that people have the ability and independence to achieve optimal health status.

The following are statements from informants:

"Very supporting, yeah... especially for prevention and promotion." (Mrs C)

"Very important, especially those related to community education so that they can be more responsible for their health" (Mrs. D).

"Health service transformations should be supported by multiple institutions, including education institutions. With GERMAS digital tool, of course it will be helpful." (Mr. M)

"We hope that GERMAS can help (reduce) non-communicable diseases... like patients with hypertension will be more organized and under control." (Mr. N)

"But we have never evaluated it by relating GERMAS and non-communicable diseases." (Mrs. S)

"We have reports related to GERMAS implementation up to the provincial level." (Mrs. H)

4. DISCUSSION

The results of this research indicate that various GERMAS efforts have been implemented which were supported by policies at the national, provincial and regional levels. GERMAS have been implemented but were not evenly distributed in several areas in terms of type and intensity. Several barriers included the absence of role models, lack of community participation, limited funds and socialization. A role model is someone who has the qualities we want to have and is in the position we want to achieve which is demonstrated through values, attitudes, perceptions, behavior [17]. In this research, the role of community leaders as models is very important, because community leaders are highly respected people in both rural and urban settings, so their behavior tends to be followed by the community. The role of community leaders as health leaders is very critical because apart from proactively implementing healthy behavior changes for themselves and their families, they must also support changes in the behavior of their community [18]. A study stated that the role of cadres as representatives of community leaders in the health sector greatly influenced the success of the program [19]. The results of other research also stated that regional heads and cadres play a crucial role in the success of COVID-19 vaccine coverage in Nepal, Senegal and Zambia [20].

Another finding from this study is that community participation in practising GERMAS was not evenly distributed or remained low in the following areas: early detection of non-communicable diseases, exercise, fruit and vegetable consumption, and creating non-smoking areas. Community participation is the primary key to the success of health promotion and prevention [21]. In several studies, various efforts have been made to increase community participation, including strengthening the narrative of social solidarity, cooperation and community empathy, building space to manage community participation at the central and regional levels, and strengthening structural networks down to the smallest government, such as hamlets. A Ghanaian study on health program planning and services suggested that the success of health programs was very dependent on community participation [22]. Likewise, research on water, hygiene and sanitation interventions and their sustainability in 29 low- and middle-income countries [23].

Furthermore, this research also found that village funding support for the GERMAS program was not evenly distributed, meaning that there were villages that did not allocate a budget or the budget was lacking. Funds are a fundamental resource for the success of development programs, including health development programs. There were several lessons learned from the success of community health programs with the support of village funds, as stated in the village ministry policy suggesting that village funds are intended for development, community and community empowerment [23]. Previous findings have proven that village funds were allocated for community empowerment so that community programs could run successfully and sustainably, and improve community welfare [24]. Likewise with the use of village funds to tackle stunting [25] and COVID-19 [26] in Indonesia. Another alternative source of funds is community independent funds. In a study of stunting prevention in the highest stunting prevalence area in Yogyakarta, namely Dlingo Sub-district, the community managed independent funds through voluntary contributions from residents and benefits from selling sorted waste from households [27].

We also found that there were various media used to socialize GERMAS to the community, including posters, banners, healthy walking campaigns, group exercise and cycling. In achieving a comprehensive program, the media has a very important role in informing programs and their follow-up, so the existence of media that has an effective and efficient impact is very necessary [28]. For example, at the start of COVID-19, vaccination activities and restrictions on mass mobilization to prevent transmission were supported by print, electronic and digital media, influencers, state leadership role models, artists, and the military and so on. Everyone must download the application to care about COVID-19 protection. Our results also indicated that there was no comprehensive digital

health to encourage GERMAS, while digital health has great potential as an educational tool [29]. Another factor is that digital GERMAS has great potential as an educational medium because almost everyone uses a smartphone and various applications on smartphones are easy to install, access, and use, including for the elderly [30]. Digital GERMAS also has the benefit of increasing independent preventive and promotive health efforts, reducing disparities in health services, and increasing opportunities for early detection of disease [31].

5. CONCLUSION

The adoption of GERMAS, from the point of view of health care workers, is essential to achieving improvements in the general population's health in communities. However, there are a number of obstacles, such as inadequate finance, an imbalanced allocation of efforts, and a dearth of role models. To address these challenges, including knowledge, disease history, prevention, and access to consultations with health specialists, digital literacy is required. In order to prevent huge storage device data consumption, this literacy should be readily available, simple to comprehend, and have a short file size. Therefore, we have come to the conclusion that health care providers require a complete GERMAS tool in order to assist and control the practice of health prevention and promotion to achieve the optimal level of health status.

6. Acknowledgement

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7. Conflik of Interest

We declare there is no conflict of interest.

References

- 1) President Republic Indonesia, "Presidential Regulation no 1 year 2017. Healthy People Movement." 2021. [Online]. Available: <https://peraturan.bpk.go.id/Home/Details/77301/inpres-no-1-tahun-2017>
- 2) T. Siswati, B. Astria, M. Primiaji, B. A. Paramashanti, M. P. Rialihanto, and L. Waris, "Epidemiological Transition in Indonesia and Its Prevention: A Narrative Review," *J. Complement. Altern. Med. Res.*, vol. 18, no. May, pp. 50–60, 2022, doi: 10.9734/jocamr/2022/v18i130345.
- 3) R. I. Kemenkes, *Laporan Riskesdas 2018*. Jakarta, Indonesia: Badan Litbangkes Kemenkes RI, 2018.
- 4) Badan Penelitian dan Pengembangan Kesehatan, "Riset Kesehatan Dasar (RISKESDAS) 2013," *Lap. Nas. 2013*, pp. 1–384, 2013, doi: 1 Desember 2013.
- 5) T. Siswati, "Faktor risiko PTM di Posbindu PTM Institusi di DIY, 2019." Prosiding Seminar nasional, UNSRI, Palembang, Indonesia, 2019.
- 6) S. Supriyati, F. Baiquni, T. Siswati, H. E. Widyawati, R. Rahmawati, and R. K. Wardani, "Social determinants of health protocol adherence among adults during COVID-19 pandemic in Yogyakarta, Indonesia," *Med. J. Malaysia*, vol. 77, no. July, pp. 5–9, 2022.
- 7) T. Siswati, S. Yoseph, D. Widiyanto, Y. Olfah, and B. Astria, "The impact of behavior change communication on healthy living movement-related knowledge and behavior among adolescents: A mixed-methods study," *Public Heal. Indones.*, vol. 9, no. 1, pp. 21–30, 2023.
- 8) A. Faiola and R. J. Holden, "Consumer Health Informatics: Empowering Healthy-Living-Seekers Through mHealth," *Prog. Cardiovasc. Dis.*, vol. 59, no. 5, pp. 479–486, 2017
- 9) R. E. Day, P. Sahota, and M. S. Christian, "Effective implementation of primary school-based healthy lifestyle programmes: A qualitative study of views of school staff," *BMC Public Health*, vol. 19, no. 1, pp. 1–16, 2019.

- 10) Sujarwoto and A. Maharani, "Participation in community-based healthcare interventions and non-communicable diseases early detection of general population in Indonesia," *SSM - Popul. Heal.*, vol. 19, p. 101236, 2022.
- 11) R. Cobos-Campos, A. S. de Lafuente, A. Apiñaniz, N. Parraza, I. P. Llanos, and G. Orive, "Effectiveness of mobile applications to quit smoking: Systematic review and meta-analysis.," *Tob. Prev. Cessat.*, vol. 6, p. 62, 2020.
- 12) O. S. Karso and A. P. Wibawa, "Research on Government Programs 'Healthy Living Community Movement' (Germas) in Bali Using Critical Discourse Analysis," *Int. J. Res. -GRANTHAALAYAH*, vol. 5, no. 6, pp. 82–91, 2017.
- 13) R. Arena and C. J. Lavie, "The global path forward - Healthy Living for Pandemic Event Protection (HL - PIVOT).," *Prog. Cardiovasc. Dis.*, vol. 64, pp. 96–101, 2021.
- 14) S. S. Fahmi Baiquni, Tri Siswati, Riadini Rahmawati, Herni Endah Widyawati, Ratri Kusuma Wardhani, "The role of social media in optimizing the healthy lifestyle movement 'GERMAS' during the COVID -19 pandemic," *JCOEMPH*, vol. 5, no. 1, p. 19, 2022.
- 15) M. S. Marcolino, J. A. Q. Oliveira, M. D'Agostino, A. L. Ribeiro, M. B. M. Alkmim, and D. Novillo-Ortiz, "The impact of mHealth interventions: Systematic review of systematic reviews," *JMIR mHealth uHealth*, vol. 6, no. 1, 2018.
- 16) L. P. C. Brewer *et al.*, "Back to the future: Achieving health equity through health informatics and digital health," *JMIR mHealth uHealth*, vol. 8, no. 1, pp. 1–16, 2020.
- 17) E. Paice, S. Heard, and F. Moss, "How important are role models in making good doctors?," *BMJ*, vol. 325, no. 7366, pp. 707–710, 2002.
- 18) A. Decuypere and W. Schaufeli, "Leadership and work engagement: Exploring explanatory mechanisms," *Ger. J. Hum. Resour. Manag.*, vol. 34, no. 1, pp. 69–95, Dec. 2019.
- 19) T. Ludwick, A. Morgan, S. Kane, M. Kelaher, and B. McPake, "The distinctive roles of urban community health workers in low-and middle-income countries: A scoping review of the literature," *Health Policy Plan.*, vol. 35, no. 8, pp. 1039–1052, 2020.
- 20) E. Ogutu *et al.*, "Success in vaccination programming through community health workers: A case study of Nepal, Senegal, and Zambia," *medRxiv*, 2023.
- 21) B. Milton, P. Attree, B. French, S. Povall, M. Whitehead, and J. Popay, "The impact of community engagement on health and social outcomes: a systematic review," *Community Dev. J.*, vol. 47, no. 3, pp. 316–334, Jul. 2012.
- 22) S. Agalga, K. A. Alatinga, and G. A. Abiuro, "Enablers and inhibitors of community participation in Ghana's Community-based Health Planning and Services programme: a qualitative study in the Builsa North Municipality," *BMC Health Serv. Res.*, vol. 22, no. 1, p. 1468, 2022.
- 23) S. Nelson, D. Drabarek, A. Jenkins, J. Negin, and S. Abimbola, "How community participation in water and sanitation interventions impacts human health, WASH infrastructure and service longevity in low-income and middle-income countries: A realist review," *BMJ Open*, vol. 11, no. 12, pp. 1–18, 2021.
- 24) J. D. Watts, L. Tacconi, S. Irawan, and A. H. Wijaya, "Village transfers for the environment: Lessons from community-based development programs and the village fund," *For. Policy Econ.*, vol. 108, p. 101863, 2019.
- 25) J. Indra and K. Khoirunurrofik, "Understanding the role of village fund and administrative capacity in stunting reduction: empirical evidence from Indonesia," *PLoS One*, vol. 17, no. 1, pp. 1–12, 2022.
- 26) B. Arifin and T. Anas, "Lessons learned from COVID-19 vaccination in Indonesia: experiences, challenges, and opportunities," *Hum. Vaccines Immunother.*, vol. 17, no. 11, pp. 3898–3906, 2021.
- 27) T. Siswati *et al.*, "Using The Theoretical Framework Of Acceptability For Assessment Of The Preventing Teen Pregnancy Program: In The Context Of Stunting Reductionin Yogyakarta," vol. 11, no. 04, pp. 36–46, 2022.

- 28) T. Siswati, "The role of social media in optimizing the healthy lifestyle movement ' GERMAS ' during the COVID -19 pandemic," *JEOCMPH*, p. 19, 2021.
- 29) M. Smits, C. M. Kim, H. van Goor, and G. D. S. Ludden, "From Digital Health to Digital Well-being: Systematic Scoping Review," *J. Med. Internet Res.*, vol. 24, no. 4, 2022.
- 30) Z. Xie and C. Kalun Or, "Acceptance of mHealth by Elderly Adults: A Path Analysis," *Proc. Hum. Factors Ergon. Soc. Annu. Meet.*, vol. 64, no. 1, pp. 755–759, Dec. 2020.
- 31) A. Awad *et al.*, "Connected healthcare: Improving patient care using digital health technologies," *Adv. Drug Deliv. Rev.*, vol. 178, p. 113958, 2021.