

Empowering universities through the Health Promoting University program for tackling non-communicable diseases

Supriyati Supriyati,^{1,2*} Riskiyana Sukandhi Putra,³ and Yayi Suryo Prabandari^{1,2}

¹ Department of Health Behavior, Environment and Social Medicine, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

² Center of Health Behavior and Promotion, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

³ Directorate of Health Promotion and Community Empowerment, Directorate General of Public Health, Ministry of Health Republic of Indonesia, Jakarta, Indonesia

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ABSTRACT Non-communicable diseases are responsible for 71% of the premature deaths worldwide. Unfortunately, 77% of those deaths occurred in the developing countries including Indonesia. In response, universities can provide potentially empowering health promoting programs for tackling the risk factors of non-communicable diseases. This study was aimed to explain the process of how to empower universities for tackling these non-communicable diseases' risk factors through the Health Promoting University (HPU) program. This study was a descriptive study. The population included Indonesian universities that were involved in the HPU development program in 2019-2021 in collaboration with Universitas Gadjah Mada and The Ministry of Health Republic Indonesia. Sample subjects were the total population of 40 universities. Data were collected through unstructured observations, short interviews, and documents. Observations were performed in 25 universities. Meanwhile, unstructured interviews were conducted with 34 respondents. Data were analyzed descriptively. The process of the HPU development and the focus programs were varied. Many factors contributed to the process of the HPU development, such as the HPU development strategies, the university leaders' commitment, networking, social capital, and participants' capacity in the health promotion. According to the HPU development process from 2019-2021, the HPU development strategy performed in 2021 was the most structured and comprehensive. The capacity building, mentoring system, leader commitment, and networking strongly contributed to the success of the HPU development. This study emphasizes the importance of the university leaders' awareness toward health and the potential resources of the university for tackling the risk factors of the non-communicable diseases.

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1. Introduction

The World Health Organization (WHO) explains that non-communicable diseases (NCDs) are responsible for 71% of the premature deaths worldwide, and 77% of those deaths occurred in low- and middle-income countries.¹ In Indonesia, NCDs have also become the leading causes of death, and responsible for 76% of the total number of deaths. Basically,

NCDs are preventable. The most effective prevention strategies for NCDs involve behavior modifications such as improving healthy diet, physical activities and smoking cessation, and controlling metabolic disorders.² Behavior modification approaches emphasize the importance of modifying social, environmental, and/or cognitive predictors of target behavior.³

Unhealthy diet, physical inactivity, smoking behaviors and metabolic disorders are the major risk factors of the incidence of NCDs, which are closely related to the social determinants of health. Hence, integrating various sectors is essential in the preventing and controlling of NCDs.⁴ The prevention

*Correspondence: supriyati@ugm.ac.id
Department of Health Behavior, Environment, and Social Medicine, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Jl. Farmako, Sekip Utara, Yogyakarta 55281, Indonesia

Table 1. The characteristics of participants.

Variables	n	(%)
Location of the university		
Sumatra island	4	10
Kalimantan island	3	7.5
Sulawesi island	2	5
Nusa Tenggara island	1	2.5
Java island	30	75
Year of HPU initiation		
2019	14	35
2020	5	12.5
2021	21	52.5
University status		
Public	8	20
Private	32	80
Total	40	100

and control of NCDs are not solely the responsibility of the health sector. In response to the NCD problem in the south east Asia region, the ASEAN University Network Health Promoting Network (AUN-HPN) recommends universities should be actively involved in the NCD prevention and control by implementing the Health Promoting University (HPU) program.⁵ The HPU promotion can strengthen the role of academic communities as healthy role models by creating a supportive environment for people to choose healthy behavior. It is a multisectoral approach necessitating involvement and mobilization of various sectors and groups in the university's society. There are three main indicators of the healthy universities: (1) system and infrastructures, (2) zero tolerance areas, and (3) health promotion areas. The implementation of the HPU program in the universities will contribute to solving the serious, life-threatening problems of NCDs among university members and the broader community.

In 2022, there are more than 3,000 universities with more than 7,350,000 students and 250,000 lecturers in Indonesia. Those numbers can be potentially empowered for the prevention and control of NCDs in Indonesia. The implementation of the HPU program will increase the university staffs' and students' awareness toward the urgency of NCD prevention and control and improve their capacity to become involved in the NCD prevention programs.⁶ The HPU program will strengthen the role of

university staff and students as the agents of change for creating a better health status in the community. Universitas Gadjah Mada, in collaboration with the Directorate of Health Promotion and Community Empowerment, Ministry of Health Republic Indonesia and selected universities have been developing HPU in Indonesia in 2019-2021. This paper aimed to describe and discuss the process of the HPU development in Indonesia.

2. Methods

This paper was a descriptive study based on the HPU development process in Indonesia, from 2019 to 2021. The HPU is a new program in Indonesia and it is necessary to provide evidence concerning its importance to convince policy makers and other related stakeholders.

The population included universities in Indonesia that were developing HPU programs in 2019-2021, in collaboration with Universitas Gadjah Mada and the Directorate of Health Promotion and Community empowerment, Ministry of Health Republic Indonesia. There were 40 universities involved in the HPU program development, and the sample included the total study population. Data were collected through unstructured observations, short interviews, and documents.

Observations were performed by visiting the universities and monitoring the activities of HPU development. Monitoring used both online and offline methods. In addition, 34 respondents were interviewed by the researcher team. Respondents were the persons in charge of the HPU development, policy makers of the university, health officers, as well as students. Persons in charge of the HPU program were lecturers, while the policy makers of the university were the rector or vice rectors, dean or vice dean, and/or the head of study programs that were involved in the HPU program development in their own university. The short interviews were conducted in person during the monitoring program or conducted online by using WhatsApp. The researchers observed various online activities of HPU development such as training, webinars and other health literacy improvement activities. Besides, the HPU declaration, championship,

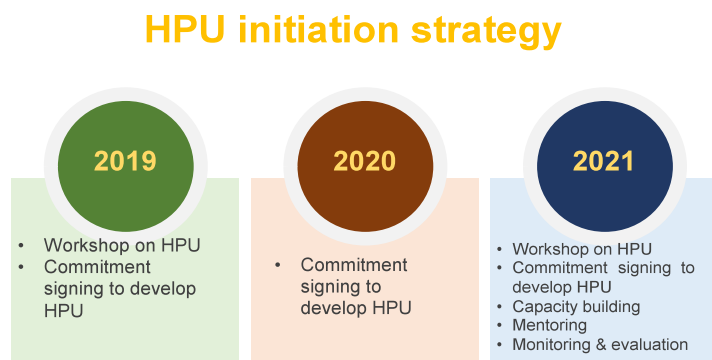


Figure 2. HPU initiation strategy.



Figure 3. Process of HPU development in Indonesia (2021).

Posbindu (community health screening) and other activities were observed directly. Furthermore, study documentation was done by analyzing the universities' reports concerning the HPU development. Data were analyzed and presented descriptively.

3. Results

The results of this study showed that many universities have been initiating the HPU development. These participants included public and private universities, as shown in Table 1.

Table 1 shows that although HPU was a new program, the locations of the participants are spread out on most of the big islands in Indonesia. In December 2019, 14 universities participated in the HPU initiation program in Yogyakarta, including the State University of Yogyakarta and the Veterans University of National Development Yogyakarta. The HPU development program was held by the Universitas Gadjah Mada in collaboration with Yogyakarta Health Office. A three-day workshop concerning the HPU model program was held to raise participants' awareness of the urgency of HPU development. All workshop participants agreed to implement the HPU program in their campus and signed the commitment sheet as the closing of the workshop.

In 2020, the number of participants was smallest due to the Corona Virus Disease 2019 (COVID-19) pandemic. Remarkably, not all of the universities that

were involved in the HPU development initiation had a health faculty or health study program.

A healthy campus network was developed after the workshop on the HPU approach. Furthermore, the workshop on HPU and the healthy campus network helped universities to develop proactive strategies in response to the COVID-19 pandemic. They were able to share with each other about their experiences and coping mechanisms during the pandemic through a WhatsApp's group.

In November 2020, the workshop participants presented their progress of the HPU development in the 2nd National Seminar on Health Promoting Universities. The seminar applied a blended approach due to the COVID-19 pandemic and participants came from around Indonesia. Besides, they signed a memorandum of understanding (MoU) with the Ministry of Health of Republic Indonesia for the implementation of HPU in their own campus. In addition, there were five universities from Central Java and East Java that were involved in the HPU initiation program by signing the MoU with the Ministry of Health of Republic Indonesia. The agreement of the universities and the Ministry of Health was focused on the strategy to improve health literacy especially for physical activities, healthy diet, mental health, reproductive health, early diagnosis and prompt treatment, safe and healthy environment as well as smoking, drug abuse, and bullying prevention. Each university was able to choose the priority topics according to their own

Table 2. The main components of HPU development among universities.

HPU development components	Description
Healthy campus team	The healthy campus team was varied between universities. Most of the universities that were involved in the 2021 mentoring program had a formally healthy campus team with the decree from rector or dean. In contrast, the other universities did not have the formal healthy campus team with the leader decree even though they had person in charge or informal team.
Healthy campus programs	All of universities (40) had healthy campus programs such as healthy diet, physical activities, mental health, creating HPU ambassador among students, early diagnosis and prompt treatment through posbindu, smoking prevention, as well as bullying prevention. In addition, most of the universities that were involved in 2021 already declared their own HPU name (i.e. HPU Pinang Masak from University of Jambi, HPU Olah Bebaya from the Muhammadiyah University of Kalimantan Timur), their own emblem, their Instagram account (such as @hpu.unriyo @hpu_unesa @hpu_undana @hpu.ump @hpu.uinsu @hpu_um @hpu_ums @hpu_unimus @hpu.unej @hpu_olahbebaya_umkt @hpu.pinangmasak) as well as their website (i.e. https://hpu.unej.ac.id/ / https://hpu.unesa.ac.id/).
Leader commitment and support	- Regulation and policy to support healthy campus - Budget allocation
Networking	- The network includes, but not limited to: - Healthy campus network; - Health office in province or district level, as well as primary health center.
MOU with the Ministry of Health	All universities (40) signed the MoU with the Ministry of Health to improve health literacy among university society, especially for physical activities, healthy diet, mental health, reproductive health, early diagnosis and prompt treatment, safe and healthy environment as well as smoking, drug abuse, and bullying prevention.

needs and available resources.

The methods of HPU development were varied from year to year. In 2019, there was a workshop and commitment signing. Unfortunately, due to various reasons, there was only the commitment signing in 2020. In contrast, there was a workshop on HPU, commitment signing, capacity building, mentoring, as well as an evaluation in 2021 (Figure 2).

The communication system during the HPU development was maintained by optimizing the Internet and information technology such as Zoom and WhatsApp. The capacity building and mentoring program on HPU was designed by the HPU team of Universitas Gadjah Mada. The mentoring program was done by empowering five public universities in Indonesia (from Sumatra, West Java, Yogyakarta, East Java, and Kalimantan) as mentors for the 21 universities in 2021. The various approaches of the HPU development from 2019 to 2021 increased the progress of the implementation of healthy campus principles in Indonesia. Previously, most of participants were curious about the HPU program

and wondered if they could apply HPU in their campus, as reflected in the following quotes.

“What is health promoting university? What should we do, and how to start it? We are wondering, whether we are able to conduct this program in our campus. It is a new concept...” (Woman, dean, private university)

“Yes, we are interested in... but how? What should we do? Is there any specific guideline or capacity building program for running the health promoting university? (Man, dean, public university)

“I think that it is a good idea. Unfortunately, we don't know how to carry it out...” (Woman, the head of public health study program, private university)

The 21 universities had chosen purposively to be involved in the HPU development program in 2021. Then, a capacity building strategy was conducted to improve participants' awareness and readiness to apply HPU in their campus. The capacity building increased their self-efficacy and encouraged them to

sign the MoU and apply the HPU program gradually, as shown in Figure 3.

An intensive capacity building and mentoring program lead to a comprehensive action to create a more supportive environment for healthier behavior among the university society. The capacity building ss emphasized the urgency of the needs assessment as the consideration of the health promotion planning. By the end of the program, most of universities had their own emblem of HPU, official Instagram and website for the HPU program, organizational structure with rector/dean decree, declared as health promoting campus, and prioritized programs of healthy campus activities. The rector or dean decree for the HPU team was necessary for the team building process. Each of them had featured programs according to their needs and available resources. Posbindu (health screening system) development, creating health promotion ambassadors at the student level, improving physical activities among the university society, building awareness on the mental health issues, and healthy diet were some of the examples of their priority programs. Most of these received the necessary support and commitment from the university leaders. Indeed, the leaders feel happy and proud that their university had chosen to be participants in the HPU development program, as reflected in the following quotes.

“We are grateful that UGM involved us in this program..., we are proud to be one of the HPU development participants, since not all universities have the similar chance...” (Man, Rector, private university)

“...this is an essential program..., sometimes we forgot that we have to practice healthy behavior until we got sick...” (Man, rector, public university)

“... it is not easy to practice healthy behavior. Health Promoting University can really help us to do it.” (Man, Vice rector, public university)

Leaders' commitment and support were highly critical for the success of the HPU development. Their support further improved the university team's self-efficacy to implement the HPU program.

This study showed that basically there were five

main components should be or had been conducted by universities for developing HPU, namely: (1) healthy campus team, (2) healthy campus program, (3) leader commitment and support, (4) networking, and (5) the collaboration and MoU with the Ministry of Health as the additional component. Table 2 describes the components of the HPU development program among 40 universities.

4. Discussion

This study showed that the HPU program development was conducted for tackling NCD risk factors in 2019-2021. The HPU initiation strategies were varied as were the participants' responses. Every single university developed their own priority programs according to their own needs and available resources. Nevertheless, all participants agreed to sign the MoU with the Ministry of Health of Republic Indonesia to implement the HPU program. The capacity building, mentoring system, leaders' commitment and support as well as the existing networking strongly encouraged participants to apply HPU strategies in their own campus successfully.

There were 40 universities from Sumatra, Java, Kalimantan, Sulawesi, and Nusa Tenggara Island that participated in this program. Participation is an essential component of empowerment.⁷⁻⁹ Basically, participation represents action or being part of a program. Thus, capacity building is needed to enable people or stakeholders to take action and participate in the program.⁶ The HPU Development program used capacity building as a strategy to enable participants to become actively involved in the program. Capacity building interventions enhance knowledge, skills, self-efficacy, change in practice or policies, behavior change, application and system-level capacity.⁹ Capacity building and community engagement are needed for tackling the NCD risk factors.^{2,10}

The capacity building was developed to improve participants' knowledge regarding HPU and improve their skills to create a tailor-made program by considering their own needs and available resources. Healthy diet, physical activities, developing Posbindu (NCD risk factors screening), creating agents of change, and improving health literacy were the most frequently selected priority programs chosen

by participants. The tailor-made programs increase the community participation.¹¹ Furthermore, some health promotion theoretical frameworks were introduced concerning the capacity building process. The theoretical frameworks help participants to guide the design, implementation, and evaluation of the intervention.¹² In addition, the capacity building that was followed by a mentoring system increased the participants' self-efficacy to conduct the HPU program successfully.¹³

This study showed how the social network has become an essential social capital of the university in the HPU development process. The existing social network allows the universities to access the available resources to support the HPU program development. Social networking is a vital necessity to support the capacity building for sustainable health promotion.^{6,11,14} Available resources will improve community engagement and participation.¹⁵ Besides, the leaders' commitment also contributes to the community participation.^{15,16,17}

The HPU development is essentially a community empowerment program in the university setting. This study highlights the importance of the capacity building as the foundation for the HPU development. Meanwhile, the mentorship program increases participants' self-efficacy to carry out the program continuously. In addition, the leaders' commitment and the existing social networks of the universities were the social capital which could potentially empower the university community for the HPU development. Thus, a major implication of this study is that HPU development should apply the principles of community empowerment strategies, including empowering the existing social capital.

This paper does not measure the effectiveness of the HPU strategy to decrease the NCD risk factors, which was one of the limitations of this study.

5. Conclusions

This study suggests that the HPU program is a strategic approach to empower the Indonesian university society for tackling NCD risk factors. Moreover, capacity building, mentorship programs, with the leaders' commitment and support as well as the existing social network play important roles in

the success of HPU development. The effectiveness of the Health Promoting University strategy for tackling the risk factors of non-communicable diseases remains a challenge for future study.

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Conflict of interests

There is no conflict of interest.

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