



## From Education to Employability: Preparing Indonesian Youth for the Health Workforce Case study of Pencerah Nusantara

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### 1. Background

With 68 million youths aged between 18-25, Indonesia currently has one of the largest youth populations in the world. However, based on findings from the Asian Development Bank (ADB), one in three young Indonesians remain unemployed for 12 months, despite having a tertiary education. (mendeley)As of 2018, the Indonesian Central Bureau of Statistics (Badan Pusat Statistik) places the number of unemployed young Indonesians at 61%. This high proportion of unemployed youth reflects a mismatch between the skills that Indonesia's youth possess and the skills that the jobs require.

International evidence has shown that a transition program between education and employment is needed in what is being termed the "*industrial revolution 4.0*". Education is no longer the sole criterion for getting a job, with many employers today, demanding a lot more than just a degree. They are looking for specific skills and experience that can contribute to a harmonious and efficient working environment. These skills are, in general terms, called the employability skills. Employability is needed for someone who wants to start and leverage their career, including early career health worker.

Early career health workers in Indonesia do not only face employability as a challenge in their careers. The uneven distribution of the health workforce in Indonesia remains an a critical, ongoing problem. As the largest archipelago in the world, the scattered Indonesian region has always resulted in the unequal distribution of health between rural-urban districts and remote or difficult to access areas.

The Ministry of National Development Planning in their 'Health Sector Review' report (2014, p.44) endorsed a set of recommendations to the MOH: "Team-based contracting is more cost-effective and efficient than an individual contract to some designated areas". A development NGO, Center for Indonesia's Strategic Development Initiatives (CISDI), had been implementing this particular strategy since 2012. 'Pencerah Nusantara' (PN) is social movement to deploy a health workforce to primary health care centers in rural areas on the basis of inter-professional collaboration. Each team of 'Pencerah Nusantara' comprises general practitioners, nurses, midwives, and health advocates from a range of academic backgrounds (CISDI, 2016).

Prior to deployment, Pencerah Nusantara is equipped with knowledge and skills to develop team-based interprofessional collaborations. A competency-based training was designed to improve the Pencerah Nusantara's abilities from the medical aspects and aspects of leadership to

improve capacity related to healthcare in underserved areas. The program aims to bridge the quality gap between education and skills needed in healthcare employment.

Moreover, during one-year service, Pencerah Nusantara implement the skills and gain knowledge of the rural health worker environment. Their deep understanding of rural health issues has drawn their attention as well as motivated them to work in underserved area after graduating from Pencerah Nusantara Program.

## 2. Aim

The purpose of this paper is to investigate employability improvement of entry-level health worker who participate in Pencerah Nusantara program. Specifically, the research tracks alumni careers after completing a one-year deployment.

## 3. Method

### *Employability*

Employability or 'soft skills' define employability as the ability to "discern, acquire, adapt, and continually enhance the skills, understandings and personal attributes that make [students/graduates] more likely to find and create meaningful paid and unpaid work that benefits themselves, the workforce, the community, and the economy" (York, 2009). This paper investigated Pencerah Nusantara alumni employability through a focus on commitment, communication- relationship building, Interprofessional Collaboration (IPC), motivation, resilience, continuous learning, analytical thinking and initiating action and creativity. Alumni employability was assessed through expert panel score and self-administered questionnaire.

Data on employability before and after completing Pencerah Nusantara program was obtained from the expert panel and the supervisor team. Of 49 participants of Pencerah Nusantara Batch V, two people were excluded because they did not take interviews with expert panels. Competency data before joining Pencerah Nusantara was explored using PN selection interviews from February 2017 which were carried out by psychologists, health professional organizations, program managers and prospective team supervisors. Post-program competencies were assessed by team supervisors who supported the team for one year. Post program competence was also assessed through an online questionnaire which was completed by the PN after completing the program. A total of 41 PN batch V filled out a post-program competency questionnaire.

Employability was scored using Likert scales with 1 as the lowest, meaning poor, and 5 as the highest, meaning very good. Data of employability improvement was analyzed using paired t-test test comparing pre and post test score.

### *Career after program*

To measure alumni career after program, we conducted a survey of the Pencerah Nusantara Alumni Batch V. A number of 48 batch V completed a self-administered online questionnaire a month after completing the program. The measured variables are: Job fields, job location, and job type. Career after program was analyzed using descriptive statistics.

Both Employability and Career after program analyzed using SPSS 21.

#### 4. Result:

##### *Pencerah Nusantara Program*

Pencerah Nusantara was initiated by the Office of the President's Special Envoy of the Republic of Indonesia on MDGs to accelerate Indonesia's achievement of the Millennium Development Goals (MDGs) by strengthening of primary health care (PHC) during 2011-2014. The programme has been implemented by the Center for Indonesia's Strategic Development Initiatives (CISDI) since 2014. The shift from MDGs to SDGs has stressed that the latter global goals should not disregard the challenges and failings of its predecessor. With a majority of middle and low-income countries falling short to meet the health goal (goal 4,5,6), the health-related SDG includes unmet targets from the MDGs, most significantly the maternal and child health targets (target 3.1, 3.2, 3.7) (UN, 2015).

Recognizing that health and social care is complex and needs multi-sectoral perspectives to meet the SDG targets, *Pencerah Nusantara* is represented by a select group of young people, comprising of general practitioners, nurses, midwives, public health specialists, and health advocates from a range of academic backgrounds. They are assigned on an annual basis into teams which are to dedicate their expertise to strengthening Primary Healthcare Centres (*Puskesmas*) and the capacity of communities in designated peripheral areas in the archipelago. Within a three-year programme length, each *Puskesmas* receives up to three *Pencerah Nusantara* teams. Thus, one cohort of *Pencerah Nusantara* consists of three batches for a three-year intervention at a subdistrict-level *Puskesmas*.

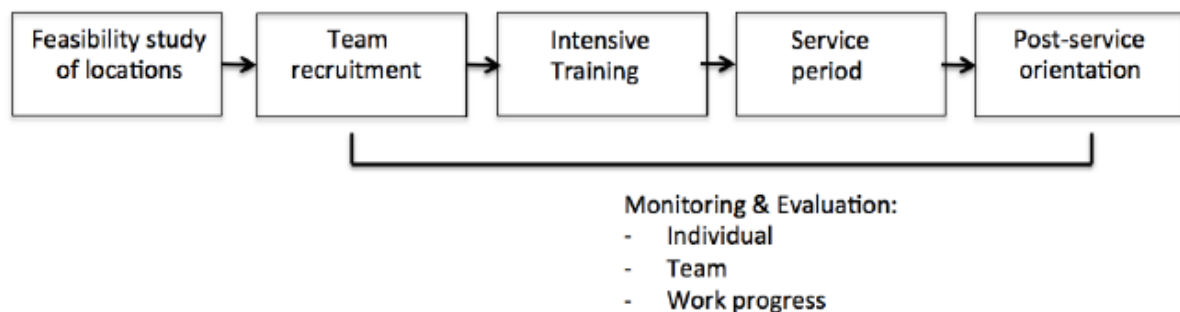


Figure 1. Pencerah Nusantara Program Outline

As depicted in Figure 1, Pencerah Nusantara builds talented young health professionals to be able to show real action for health improvement in Indonesia. This program only recruits fresh graduates and young health workers who do not have any experience in the health system.

The recruitment process involves some stages assessed not only the cognitive skills but also the applicant's ability in working in a team with circumstances. The selected applicants are also trained before deployment. Each applicant is equipped with knowledge and skills to develop team-based interprofessional collaborations and improve capacity related to healthcare at the *Puskesmas*. A seven-week training on leadership skills, team building & interpersonal skills, medical capacity, management, initiating action and community

mobilization are given to ensure that the selected applicants will show the best performance in their assignment.

Throughout the training process, the Pencerah Nusantara members are already grouped into teams, each with a general practitioner, nurse, midwife, and 1-2 health advocate. Each profession needs to understand the other professions better as they learn how to work in close quarters as fellow team members. Trainers are introduced from contributory disciplines, which generates inter-professional discourses that shape collaborative thinking and behavior. Assisted by a team facilitator, they are given specific training materials to build their teamwork capability, adapt with one another's habits and attitudes, and generate excellent communication among one another to overall create a conducive and collaborative working atmosphere.

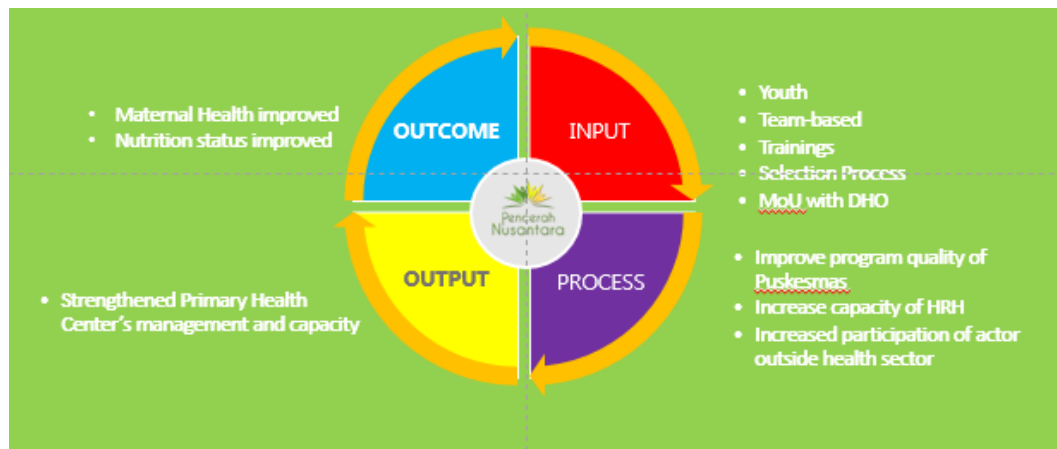


Figure 2. Pencerah Nusantara Program Cycle

After the individuals finish their training, they are placed in the service area. During their service period, each team is assigned a team-facilitator that monitors their team dynamics as well as personal development. By monitoring their emotional state, especially in high-stress conditions, facilitators can provide psychological empowerment as needed. Upon the completion of their assignment, teams are given the space to reflect on their experiences and provide an evaluation of the program. They are also exposed to opportunities to contribute to Indonesia's development beyond their service period, and how they can still support Pencerah Nusantara's work in the future. Overarching throughout the process cycle is the monitoring & evaluation system. It is designed to ensure the relevance, impact, and effectiveness of each phase, and undertaken in several levels: individual, team, and work progress.

We observed the effectiveness of team-based program based on its ability in developing the young health workers employability as individuals and preparing their readiness to work in the competitive health labor market.

### *Employability Improvement*

The effectiveness of Pencerah Nusantara Program on individual employability was analyzed by taking a comprehensive review of its evidence in contributing to personal leadership development. The value of *Pencerah Nusantara* action learning model in this paper is



analyzed through a cohort study on the personal achievement on six personal qualities which should be utilized by a health worker in a team-based context.

Table 1. Pre and post service observation on personal qualities

	Pre (n=42)			Post (n=42)		
	Poor	Moderate	Good	Poor	Moderate	Good
Commitment	0	29	13	0	14	28
Communication & relationship building	0	21	21	0	38	4
Teamwork	0	24	18	0	25	17
Analytical thinking	0	29	13	0	14	28
Continuous learning	0	33	9	0	23	19
Initiating action and creativity	0	28	14	0	25	17

Table 1 shows that even though there is no individual had poor personal qualities, the team-based program shows that there is improvement in Employability score across a number of the qualities listed. The program increased the number of individuals who have a proper commitment, analytical thinking, continuous learning, and action and creativity initiation. Surprisingly, the action learning failed to improve or even maintain qualities related to working with others. There is also a slight decrease in the number of individuals with excellent ability in communication and teamwork after assignment. Further, the researchers should underline the team-based assignment in the service period as other determinants which intervene in personal qualities development.

Table 2 Descriptive analysis

Variable	Mean	SD	t	P
<b>Commitment</b>				
Pre-program	3.26	0.57	-14.75	0
Post-Program	4.85	0.36		
<b>Communication &amp; Relationship building</b>				
Pre-program	3.47	0.55	-11.37	0



Post-Program	4.57	0.54		
<b>Team work</b>				
Pre-program	3.36	0.57	-13.25	0
Post-Program	4.72	0.45		
<b>Analytical thinking</b>				
Pre-program	3.26	0.53	-17.02	0
Post-Program	4.7	0.46		
<b>Continuous learning</b>				
Pre-program	3.13	0.54	-21.51	0
Post-Program	4.94	0.25		
<b>Initiating action and creativity</b>				
Pre-program	3.21	0.59	-16.25	0
Post-Program	4.87	0.34		
<b>Total score</b>				
Pre-program	24.84	5.75	-22.10	0
Post-Program	36.71	7.78		

Descriptively, the team-based program significantly related to the improvement on all of six personal qualities ( $p=0.00$ ). The most significant improvement is on the continuous learning qualities ( $t=-21.51$ ). While, the lowest improvement is on the communication and relationship building ( $t=-11,37$ ). The result show that the action learning does offer a promising capacity-building that in developing personal qualities of fresh graduated health professional.

#### *Career after program*

Pencerah Nusantara offers a new form of deployment scheme for healthcare. Pencerah Nusantara provides these young workers, generally are fresh graduates who do not have work experience, to feel the real conditions of health development in Indonesia. By participating in this action learning, they get the skills and direct experience in their placement as health workers. The researchers argue that this experience is meaningful as the individual may be able to anticipate a highly competitive health labor market following the conclusion of their time in Pencerah Nusantara.

Table 3 Employability tracer of Pencerah Nusantara

	n	%
<b>Job Field</b>		





Health	40	93.0%
Non-health	3	7.0%
<b>Job location</b>		0.0%
Rural	25	58.1%
Urban	18	41.9%
<b>Job Type</b>		0.0%
Civil servant	15	34.9%
Private	14	32.6%
NGO	12	27.9%
Entrepreneur	2	4.7%

Table 3 explains that most of *Pencerah Nusantara* has a linear job progression with healthcare after they finish their service. Moreover, there are more than half of *Pencerah Nusantara* alumni who choose to work in a rural area. This fact is promising to answer the maldistribution of health worker in Indonesia. The variety of job type is also promising as although, work in the government and the private sector still constitutes the highest proportion of alumni, the variability of job type exists. Over 1 in 4 *Pencerah Nusantara* alumni have gone on to become active personnel of NGOs which prioritize non-commercialization of healthcare. The action learning of *Pencerah Nusantara* has also been successful in encouraging a number of alumni to become entrepreneurs.

## 5. Discussion

Our findings suggest that a one-year team-based program is beneficial to boosting employability skills for early career health workers in Indonesia. The program also motivates early career health workers to remain engaged in underserved areas in Indonesia.

With a year of living among the community, and providing health care service at Puskesmas in designated areas, *Pencerah Nusantara* have the opportunity to use their theoretical knowledge in a workplace. They faced the practical cases and must apply their competencies as health worker. Further, as health workers in Puskesmas, *Pencerah Nusantara* must work hand-in-hand with the local healthcare workers and community in the assignment area. These conditions require PN to have fast adaptation to working with new people and developed interpersonal communication to build effective collaborations with local health worker.

Prior to participating in the *Pencerah Nusantara* program, the applicants receive information that they will be placed in remote areas with limited access for one year. Provided with this information from the selection process, applicants have a commitment and are ready to be placed in remote areas. During the training, PN receive inspiration from alumni who had previously served in remote areas, so that they know the area where they were placed and the benefits of the program. In *Pencerah Nusantara* Program, commitment can generally be characterized by at least three factors: a strong belief in and acceptance of the organization's goals and values, a willingness to

exert considerable effort on behalf of the organization and a responsibility to complete assignments to a high standard. Fabiene (2016) found that job satisfaction is significant determinant on employee's commitment. Similarly, a study from Nuzulul (2018) showed that most of Pencerah Nusantara alumni were satisfied with the one year program due to the remuneration provided, as well as the opportunity to study and gain career development.

Deployment in different cultural contexts often brings communication challenges. Indonesia has a vast array of cultures and local dialects, so understanding cultural differences before Pencerah Nusantara are deployed is considered as an effort to optimize communications with local people. To answer the challenges, training on cross-culture adaptation was part of PN's intensive training program. Cross-cultural training (CCT) has long been advocated as a means of facilitating effective cross-cultural interactions (Brislin, 1981). In addition, on commencement of their deployment, PN learn and practice the local language and culture through interactions with local health worker. By speaking to community in their native language, PN can create a trust that will help them to more effectively deal with communities and conduct health interventions.

The program facilitates opportunities to PN to meet and have regular joint activities. Informal communication during joint activities has been frequently mentioned as needing to be nurtured in order to develop a good level of teamwork (Gucciardi, Espin, Morganti, & Dorado, 2016; Markle-Reid et al., 2017; Van Dongen et al., 2016). Through these experiences, trust is undoubtedly taking shape. A study from Dewi (2017) found that Pencerah Nusantara were initially uneasy to be open to other members in their respective teams in the first two weeks of training, but found their team members to be more trustworthy after the seven-week training finished. Yet, they perceive trust-building is a continuous process that evolves during their assignment in designated areas.

The employability of an individual is understood as a composition of many factors, including educational background, work and life experience, behavior, motivation and other personal attributes. All them joined together create the capacity of an individual to find a job, maintain employment and be able to move through the changing world of working (Weinert et al . 2001, 52)

## **6. Conclusion**

Our findings suggest that a one-year team-based deployment program boost skills and personal qualities of early career health workers in Indonesia. This program has provided an experience to help health workers increase their knowledge about health issues that occur in the outpost and outskirts areas of Indonesia. Facing a range scenarios which routinely occur in these areas directly increases the medical expertise of health workers in resolving various health problems. Working with limited resources in the field has improved the health workers' resilience and proven leadership in achieving the goal of working. The program also motivates early career health workers to work in undeserved areas in Indonesia. Further follow-up studies will be needed to assess Pencerah Nusantara alumni as they progress further in their careers.

## **7. Recommendation**





- Program improvement is needed to prepare health workers who are ready to work especially in communities with the latest community context.
- The curriculum for health education needs to consider material content related to communication, leadership, local governance and strengthening character and self-integrity.
- Deployment team programs such as local-outsourcing (PTT Daerah) and Nusantara Sehat placed in remote areas need to be strengthened by pre-departure training, which provides better competence and understanding of work in the field
- Inter-professional collaboration in the Pencerah Nusantara Model is very influential on the employability of each individual. A team-based model as a learning process and within the work setting is one solution to improve work readiness and work effectiveness.
- The government must encourage the use of a team-based model in various health interventions, it is able to improve service quality, access and effectiveness of programs.

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