

# Retention and Job Satisfaction of the Individual Nusantara Sehat Participant in 2018

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## ABSTRACT

Health services still have to deal with high turnover of health worker as a common issue in developing countries. Generally, the retention problem has a significant impact on continuing adequate health care to people especially in remote areas. For that reason, The Nusantara Sehat became the government's priority program to fulfill the health worker needs in boundary areas nowadays. Since 2017, the program has individual nusantara sehat (ISN) assignment as an additional scheme beside the team based approach to fulfill the national health worker standard in primary health care. Therefore, it was necessary to provide an overview of the retention of INS assignment as an affirmative program in remote areas in Indonesia. The research was performed to explore the relationship between job satisfaction and retention of the INS personnel. The research was conducted a quantitative methods. Electronic questionnaires were distributed to individual nusantara sehat at December 2018. Total 444 questionnaires was returned in the survey and answered completely. The research found that 88.3% of the INS personnel reported as good retention and 44.4% of respondents had high job satisfaction. The Chi-squares test showed the significant relationship between the INS personnel's retention and job satisfaction (p value=0.001, OR=3.09). The study identified the crucial satisfier factors were related to socio-cultural situation. In the other hand, organizational conditions were considered as the important dissatisfied factors to health workers retention. Thus, it was important to develop the health workers' management scheme based on their location condition and basic supporting needs. The specific approach according the regional characteristics need to be applied to retain the health worker retention and satisfaction in remote areas. The government also needs to setting up the remote areas-oriented health education initiatives.

**Keywords:** *health worker, retention, job satisfaction, nusantara sehat, health system policy*

## 1. INTRODUCTION

The low retention of health workers have been identified as a common problems in developing countries [1]. This situation could threaten continuity health care the problem becomes more crucial in rural and remote areas where most critical public health problems are found [2]. Indonesia's region consisted of thousands of island makes health care delivery very challenging. Many islands have heavy barrier and can only be reached by water transportation such as boats. While in remote areas, some locations require double-axle vehicles or walking to access them. According those access condition, 23% of primary health care (puskesmas) were inadequately staffed based on data of June 2018 [3].

The government established team-based health worker placement in remote area in 2015 which known as the Team Based Nusantara Sehat (TBNS). The team focused to provide health care in remote areas and Border Island. Nusantara Sehat team were assigned into minimum 5 people different profession for two years. They were responsible on continuity of care, community

empowerment, and integrated health care in their assignment location [4]. The placement policy changed in 2018 and individual scheme were allowed in the program named Individual Nusantara Sehat (INS). Unlike regulation on the team, the INS participants could choose the location based on their preference [5].

Beside geographical reason, the health worker remain in rural area because of working conditions, opportunity to generate additional income, prestige or other situation-specific factors [6]. Other than that, study in Africa reported many health worker occurred demotivation and frustration because of job dissatisfaction, lack of supporting facilities, and inappropriate human resource management [7]. The recent study identified how social work condition issue become the external key factor of motivation and retention on health worker. Study in Malawi mentioned that lack of appreciation and disrespectful action of management could disrupt work environment and motivation on 84 health workers in the last 3 month [8]. In addition, difficult professional relationships among teammates (peer-relation) could

trigger frustration and feelings of being left behind on health workers in rural area [9].

Generally, many recent studies performed to highlight situation of the health worker retention, motivation, or job satisfaction in the remote areas. They examined a single or few determinant factors of those critical variables in various methods. Some research paid particular attention to incentives associations with health workers motivation or retention [10][11]. While several studies pointed out multiple factors which related to job satisfaction. Even though several studies have addressed job satisfaction among health workers, there were not any recently studies which focused on the issue of satisfaction with health workers' comfort and job recent especially in challenging work condition especially in remote areas setting [7][12]. For that reason, this study aimed to explored relationship between job satisfaction and the retention of health workers in remote areas.

**2. METHOD**

Data were collected using a cross-sectional survey. The population of study were the Individual Nusantara Sehat (INS) personnel whom were assigned in all over remote areas in Indonesia. The study used a quantitative methods where electronic questionnaires were distributed at December 2018. The link access of survey was limited to active INS personnel. Ten health professions were involved in the survey including physicians, dentists, public health personnel, midwife, nurse, sanitarian, nutritionist, pharmacist, pharmacist assistant, and laboratory technician. Total 444 questionnaires was returned with complete responses. The questionnaire consisted of semi-structured and self-administered questions. INS personnel were asked to respond questions about individual characteristics, motivation, retention, job satisfaction, and self-assessment on their perceived mental health disorder.

**3. RESULTS AND DISCUSSION**

**Results**

**Background characteristics of respondents**

A total of 444 participants enrolled in the study. The involved INS personnel were varied ranging from whom assigned less than a month to those that have been 15 months in the location. Of these, approximately two-thirds (61%) of participants were female and about 76% were single. Based on their professional background, the highest proportion of respondents were public health personnel (16%) while pharmacists assistants were being the lowest at 4.7% (Table 1).

**Job Satisfaction and Retention Among Health Professions**

In general, most of INS personnel were dissatisfied with their job. The satisfaction score of 55.6% personnel were classified as low job satisfaction. In converse, the retention perception of health workers were relatively high. All respondents were asked about the willingness to stay, and the majority (88.3%) reported that they were comfortable living in their current location (Figure 1).

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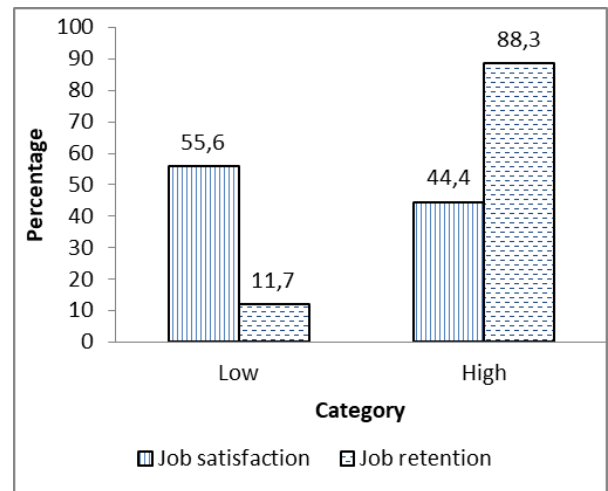


Figure 1. Proportion of Job Satisfaction and Retention

Table 1. The job satisfaction and retention among health professions in remote area

Characteristics	Job Satisfaction				Retention				Total	
	High		Low		High		Low		N	%
	N	%	n	%	n	%	N	%		
<b>Profession</b>										
Physicians	9	32.1	19	67.9	23	82.1	5	17.9	28	6.3
Dentists	13	29.5	31	70.5	34	77.3	10	22.7	44	9.9
Public Health	33	46.5	38	53.5	64	90.1	7	9.9	71	16
Midwife	15	37.5	25	62.5	34	85	6	15.0	40	9.0
Nurse	23	40.4	34	59.6	48	84.2	9	15.8	57	12.8
Sanitarian	25	55.6	20	44.4	41	91.1	4	8.9	45	10.1
Nutritionist	34	51.5	32	48.5	61	92.4	5	7.6	66	14.9
Pharmacist	13	41.9	18	58.1	29	93.5	2	6.5	31	7.0
Pharmacist assistant	12	57.1	9	42.9	19	90.5	2	9.5	21	4.7
Laboratory Technician	20	48.8	21	51.2	39	95.1	2	4.9	41	9.2
<b>Gender</b>										
Male	89	51.7	83	48.3	156	90.7	16	9.3	172	38.7
Female	108	39.7	164	60.3	236	86.8	36	13.2	272	61.3
<b>Marital status</b>										
Single	152	44.8	187	55.2	301	88.8	38	11.2	339	76.4
Married	45	42.9	60	57.1	91	86.7	14	13.3	105	23.6
n= 444										

Table 1 showed the proportion of high job satisfaction among INS personnel were varied by professions. pharmacist assistants were reported as the highest proportion of respondents who satisfied with their work condition (57%). Generally, health workers retention situation were better than job satisfaction. Over 80% of respondents reported high retention on most of professions. The laboratory technician were rated as the highest at 95%. In terms both of high retention and job satisfaction, dentist were identified the lowest proportion. Based on the demography characteristics (Table 1), the result showed male health workers has higher proportion of job satisfaction (51.7%) and retention (90.7%). Meanwhile, job satisfaction and retention in the married health workers was indicated to be lower than those who are single. Job satisfaction of single health workers were 44.8% and the retention were 88.8%. Women are less likely to accept difficult working condition in term geographical access [13]. Women tend to prefer in urban location [14]. Sociocultural factors were often considered by women in accepting positions in rural, remote areas for extended periods. Those consideration would be more complicated for married women. They prefer to live approaching their family or where their husband's job are [13][15].

In general, this study revealed retention and job satisfaction differed based on marital status [13]. Married health staff were reported have lower retention and job satisfaction than the unmarried. It was discussed in the previous study that single workers typically have fewer

family responsibilities and are more prepared to move to new place [16]. The finding was consistent with study mentioned that being single was positively related to organizational commitment among health personnel in remote areas [4]

Retention and job satisfaction varied among the profession background. Health professional who could do private practice tend to have a low preference of surviving in rural areas. The freedom of private practice was an important consideration for most workers such as physicians, dentists, and midwives [13][15][17]. The findings of this study highlighted dentist as the lowest profession both in retention and job satisfaction among the health workers in remote areas. Previous studies identified several social and professional reasons in rural areas setting. The main reasons were concerns about difficulties on financial security due to smaller population size, lower income of clients, and tendency of population not to seek regular dental treatment [18]. The other factors were related to professional issues. Dental practise in rural area was perceived as high level responsibility and autonomy. The lack of dentist in the rural area would increase workload. In addition, a shortage of specialists in the area caused difficulty in referring patients. Thus, general dentist have to performed multitasking skill of treatment [19]. Moreover, access to social, cultural, educational and professional opportunities increase health workers preference to settle in particular areas [16].

Table 2. Relation between Job Satisfaction and retention among Temporary Health Workers in Remote Area

Job Satisfaction	Retention				Total		P value
	High		Low		n	%	
	n	%	n	%			
<b>High</b>	189	95.9	8	4.1	197	44.4	0.001
<b>Low</b>	203	82.2	44	17.8	247	55.6	

Bivariate analysis result indicated a significant relation between job satisfaction and retention among temporary workers in remote areas (Pvalue <0.005). Retention was rated high in almost all the temporary workers whom had good job satisfaction (95.9%) in remote areas. Statistical analysis estimated that the health personnel with high job satisfaction would have 5.2 times the opportunity to have high job retention compared to those with low job satisfaction (Table 2).

**Satisfier Factors Among Health Workers in Remote Areas**

Six important factors were identified as satisfier factors based on the INS personnel responses. Of these six were classified each of 2 intrinsic, organizational, and socio-cultural factors (Table 3). Most of health workers considered socio cultural as their important motivating factor to retain in remote areas. The community acceptance and intention to serving people were rated as two of the most critical predictors by respondent. The organizational factor reported most frequently was comfortable work situation. Interestingly, one of the intrinsic factors that is also listed by respondents as a determinant of retention was interest of nature. They might considered the opportunity to enjoy the natural scenery daily as an internal reward.

Table 3. Satisfier Factors among Health Workers in Remote Areas

Main Satisfier factors	Yes	Freq (%)	Category
Personal safety	44	11.2	Socio-cultural
Community acceptance	134	34.2	Socio-cultural
Adequate living condition	35	8.9	Organizational
Serving people	108	27.6	Intrinsic
Comfortable work situation	65	16.6	Organizational
Interest of nature	6	1.5	Intrinsic
n=392			

Community acceptance and personal safety were recognized as important considerations for health workers to remain stay in remote areas. This correspond

with other studies on retention and job satisfactions of health workers in developing countries setting. Study in Lahora Pakistan indicated that intrinsic factors and socio-cultural as important motivators among physicians [20]. Community feedback (patient appreciation) were considered as strong predictor for health workers satisfaction sin rural areas [8][21][22][23]. The study also showed that intrinsic and organizational factors were considered by health worker as motivating factors. Individual intention to serving people became crucial predictor to survived in remote areas [20].

In order to build positive intention to serving in remote areas, it should to intervene health worker education. Health school could contribute to improving remote area practice by adopting remote areas-oriented admission strategies and curricula. Health school should expose students to remote are regions [19]. In order to completing the supporting educational ambiance, govenment should consider to relocate the health school from urban to rural/remote areas. Some countries have succesfully adopted those strategies such us Canada and Brazil [24].

**4. CONCLUSION**

The situation of INS personnel’s job satisfaction and retention represented current particular challenge in relation to retaining health workers in remote areas in Indonesia. In general, the retention based on health worker perception were high among the INS personnel. Conversely, level of job satisfaction of the health workers in remote area were quite low. These situation could lead to various problem in the future especially related to the quality of services and health workers performance. The study also identified the strong satisfier factors were related to socio-cultural situation. In the other hand, organizational conditions were considered as the main dissatisfier factors to health workers retention.

Based on the situation, government initiatives should focus to develop the health workers’ management scheme by their location condition and basic supporting needs. The specific approach according the regional characteristics need to be applied to retain the health worker retention and satisfaction in remote areas. In addition, intervention of production aspects need to be improved by remote area-oriented educational strategies. Indonesia could adopt succesfull implementation in several countries where curricula were designed to more expose remote-areas health care and shifting their school location away from urban areas in order to increase health students’ retention and motivotian to work in remote areas.

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