

# Determinants that Influence Relationship between Motivation and Job Satisfaction of Health Workers at Primary Health Care in Indonesia

Armedy Ronny Hasugian<sup>1,3</sup>, Jaslis Ilyas<sup>1</sup>, Besral<sup>2</sup>, Adang Bachtiar<sup>1</sup>

<sup>1</sup>Administrative Policy and Health Department, <sup>2</sup>Biostatistics Department, Faculty of Public Health, University of Indonesia, Depok, Indonesia, <sup>3</sup>National Institutes of Research and Development, Ministry of Health Republic of Indonesia

## Abstract

**Background:** The result from first National Study in Indonesia showed motivation and job satisfaction of health worker was low. The objective of this study was to identify determinants factor that influence relationship between motivation and job satisfaction of health worker at PHC in Indonesia.

**Method:** This was an advance analysis of RISNAKES 2017, a crossed sectional study which conducted at PHC in Indonesia. The respondents were physician, dentist, nurse, and midwife. Structural Equation Modelling (SEM) was used for analysis the relationship.

**Result:** Total 402 health workers recruited from 302 at PHC in Indonesia and the model association was fit (Critical Ratio=8.057,  $p < 0.000$ ). Motivation was responsible for 51% variance of job satisfaction. "Length working at current PHC" was the only determinant relate significantly, but there were some significance on parts of observed variable which associated with construct variable.

**Conclusion:** "Length working life at current facility" was determinant that influenced the relationship between motivation and job satisfaction.

**Keywords:** Human Resource, Health Worker, Job Satisfaction, Motivation, Indonesia.

## Introduction

Primary Health Care/PHC (PUSKESMAS) is a first line of community health service in Indonesia, located in every sub district in Indonesia, and their duties are to promote, prevent, curative and rehabilitate of health communities based on National Health. The best performance and productivity of health worker is important to manifest it. The most common approach to

achieve that is optimizing motivation and job satisfaction of health worker.<sup>1</sup> National study showed motivation and job satisfaction of Indonesia's health workers were only 43% and 23%.<sup>2</sup>

World Health Organization (WHO) already recommended the policy to improve motivation and job satisfaction of health worker at health facility.<sup>3-5</sup> The strategies were incentive, learn new skill<sup>6</sup>, supportive supervision<sup>7</sup>, strategy for future carrier<sup>8</sup>, work atmosphere<sup>9</sup>, and etc. All of the strategies are depend to the basic characteristics of health worker and their working environment or determinant factor. Understanding determinants of motivation and job satisfaction and their relationships is a basic to choose the best strategy, including at Primary Health care/PHC (PUSKESMAS) in Indonesia.

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### Correspondence Author:

**Armedy Ronny Hasugian**

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e-mail: medyrh@gmail.com

Hp.+6281214068314

The objective of this article was identified the

determinants that influence relationship between motivation and job satisfaction at PHC in Indonesia. Structural Equation Modelling (SEM) is a tool of statistic and one approach that can be used to understand and identified the determinant. Through this approach would help policy maker to develop design policy option on health worker responses.

### Material and Method

This is an advance analysis from the first study of National Human Resource of Health Study (RISNAKES) 2017 for health worker at government health facility including PHC <sup>2</sup>. This was a cross sectional study, the respondent was a physician, dentist, nurse and midwife at PHC and observed at “time study” by independent enumerator from open until closed time of PHC. They were also answer “motivation and job satisfaction questionnaire” themselves (self-administered questionnaire) too. Entry and cleaning of this data were already doing by laboratory Management Data on National Institutes of Health Research and Development, Ministry of Health Republic Indonesia. The respondents signed inform consent voluntary before start the study and they had opportunity to understand the questioner before start answer. All of the initial names or place during recruitment and publication were confidential.

Measurement of motivation was using indicators from instrument in Kenya by Muntale at all, with 23 questionnaires.<sup>10</sup> Meanwhile, the of job satisfaction was using short questionnaire Minnesota Satisfaction

Questionnaire (MSQ) that already using in many field study to measure the satisfaction. The determinants factor were “Job suitability” (suitable of health services activity at PHC<sup>11</sup>, <80% vs ≥80%), “Regional”(Jawa vs Non-Jawa-Bali, “Occupational”(Physician vs Not Physician), “Adequate income” (adequacy of one month salary for their live activity; Yes vs No), “Saving money” (capability of health worker to saving his income from 1 month salary; Yes vs No), “Length of working life at health facility(<8 years vs ≥ 8 years), and “Length of working life at current PHC”( <5 years vs ≥ 5 years).

Univariate analysis used to identify characteristic of respondent, and analysis of reliability indicator of motivation and job satisfaction questionnaire used Cronbach Alpha test with cut off > 0.7.<sup>12</sup> Structural Equation Modelling (SEM) assessed association between motivation and job satisfaction with model fit were CMIN/df<2, RMSEA <0.08, GFI >0.90, CFI>0.90, TLI>0.90 and SRMR nearest <0.08.<sup>13</sup> The reliability and validity of construct variable of model was analysed by Average Variance Extracted (AVE) and Construct Reliability (CR). Invariant measurement was done to identify determinants influence association between motivation and job satisfaction, only p value ≥0.05 can be compared. SEM analysis used AMOS 24.

### Results

Total 402 respondents analysed at 302 PHC from 1430 respondents at 425 PHC in “time study”, the entire characteristic was showed at table 1.

**Table 1: Characteristic respondent of the study (n=402)**

Characteristic	Group	Frequency	Percentage
Sex	Man	79	19.7
	Woman	323	80.3
Occupational	Physician	166	41.3
	Dentist	46	11.4
	Midwife	97	24.1
	Nurse	93	23.1
Job suitability	≥80%	137	34.1
	<80%	265	65.9
Regional	Jawa Bali	140	34.8
	Non Jawa Bali	262	65.2
Adequacy Income	Yes	191	47.5
	No	211	52.5

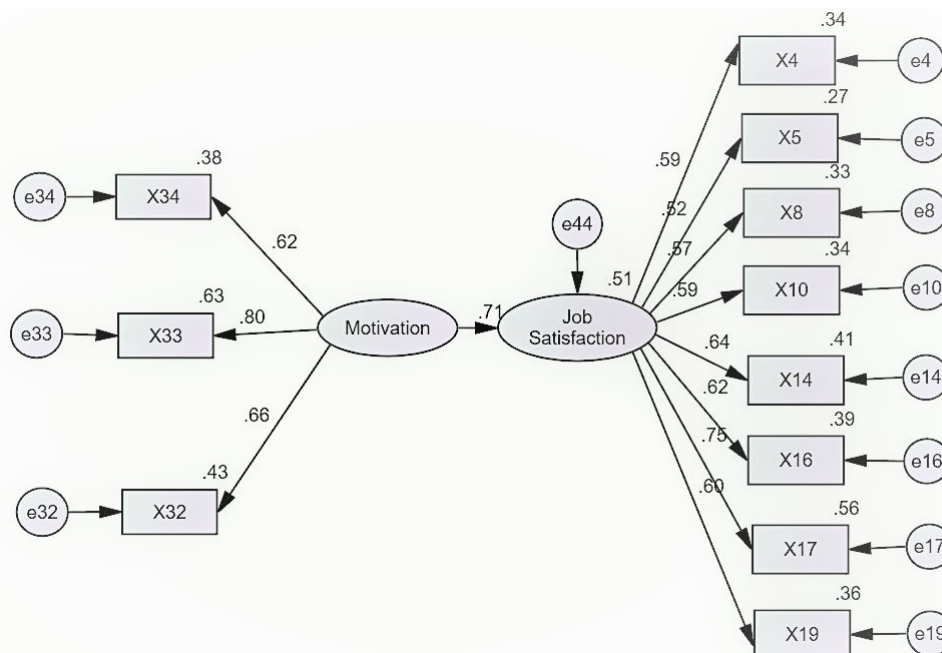
Characteristic	Group	Frequency	Percentage
Saving Money	Yes	170	42.3
	No	232	57.7
Length of working life at health facility	≤8 years	208	51.7
	>8 years	194	48.3
Length of working life at current PHC	≤5 years	224	55.7
	>6 years	178	44.3
	<b>Median (SD)</b>	<b>Minimum</b>	<b>Maximum</b>
Age (Years)	34(8.18)	22	60
Length of working life at health facility (Years)	8 (7.99)	0.5	37
Length of working at life current PHC (Years)	5 (6.09)	0.5	31

Source: Own research

Mean of 23 indicator of motivation was range (SD) 1.85(0.89) - 4.19(0.56) and 20 indicator of job satisfaction was 2.86(1.04) – 3.89(0.62). The indicators reliable to analyse as a motivation and job satisfaction construct variable with Cronbach Alpha 0.75 and 0.90.

The model based on 23 indicators motivation and 20 indicators job satisfaction were developed and showed only 3 indicator of constructs motivation and 8

of job satisfaction were selected. The model was fit with CMIN/df=1.696, GFI=0.971, TLI=0.969, CFI=0.976, RAMSEA=0.042, SRMR=0.036, all the path diagram was differently significant (p<0.000) (figure 1). The AVE for construct motivation was 0.48 and job satisfaction was 0.36, meanwhile CR of construct motivation was 0.73 and job satisfaction was 0.83. This result can be accepted and indicating the variable were reliable and valid<sup>14</sup>.



Note: X4=“The chance to be “somebody” in the community”, X5=“The way my boss handles his/her workers”, X8=“The way my job provides for steady employment”, X10=“The chance to tell people what to do”, X14=“The chances for advancement on this job”, X16=“The chance to try my own method of doing the job”, X17=“The working conditions”, X19=“The praise I get for doing a good job”, X32=“I am proud to be working for this hospital”, X33= “I find that my values and this hospital’s values are very similar”, X34=“I am glad that I work for this facility rather than other facilities in the country”. Source. Own research

Figure 1: Model fit of relationship between motivation and job satisfaction (standardized regression weight).

The result of invariant measurement for determinants showed only factor “Job suitability” (P value of measuring weights=0.122, P value of structural weight 0.167), “Regional” (0.231, 0.283), “Length of working life at health facility” (0.189, 0.091), “Length of working life at current PHC (0.288, 0.070)” can be compared and the model was fit. The comparative analysis showed only “Length of working life at current PHC” influences association between motivation and job satisfaction (regression weight estimate <5 years vs  $\geq$ 5 years; 0.81 vs 0.47,  $p < 0.05$ ) with significantly different indicator “glad work at current PHC” < 5 years higher than  $\geq$ 5 years. There were still significances different on some parts of observed variable at “Regional” construct; i.e. job stability (X8) and job advancement (X14); and “Job suitability” construct; i.e. praise/appreciation for good job (X19); although no significant influenced to relationship between motivation and job satisfaction. Meanwhile, there were dominantly different indicator for determinants “Occupational”, “Adequate income” and “Saving money”, i.e indicator the way of X5, job stability (X8), job advancement (X14), chance used own method (X17), praise/appreciation for good job (X19), and glad work at current PHC (X34), though they were no invariant.

## Discussion

There was a significantly association between motivation and job satisfaction of physician, dentist, nurse, and midwife (health worker) at PHC in Indonesia. The 11 indicators depicted the working environment (extrinsic motivation) of organization and showed the harmonization between environment and health worker and this confirmed the “work motivation” theory and “work adjustment theory”.<sup>15,16</sup> In this study, the motivation has related with 51% variance of job satisfaction, this condition showed motivation of health worker play an important role for job satisfaction of health worker at PHC in Indonesia. Someone with higher motivation had a power from inside and makes the person do important better for themselves and make them satisfy.<sup>6,17-19</sup>

The association between motivation and job satisfaction was significantly different in “Length of working life at current PHC” group, which working life  $\leq$  5 years had higher association than  $>$  5 years. It showed that manage “length time of working” was important to improve relationship between motivation and job satisfaction. The important indicators to manage

that were the working condition and happiness. This situation consistent with other studies and showed “working condition” such as quality team collaboration, positive work environment, moral distress, interaction with management and health worker, length of working, would influence the motivation and job satisfaction.<sup>20-22</sup> Moreover, the management of human resource, leadership, job description, infrastructure, environment, “being important” might relate with the situation of health facility/PHC that influence the happiness of health worker.<sup>23</sup> However, the relationship was same after 8 years working at PHC.

Praise/appreciation, job stability and job advancement were important indicators that differently significance in determinant “Job suitability” and “Regional” even both of them were not influencing the relationship between motivation and job satisfaction. Praise/appreciation is important in order get high job suitability and study on Chinese Nurses showed that psychological reward as a praise/appreciation would increase job satisfaction beside a psychological payment.<sup>24</sup> Meanwhile, many health workers had hesitation about their job stability and advancement if their work at remote area or with the low economic is. This is consistent with study at Pakistan, that building career progression was needed for motivation and retention of health worker.<sup>25</sup>

Determinants “Adequate income”, “saving money” and “Occupational” were not influence the relationship between motivation and job satisfaction, but their dominant indicator showed working condition was crucial for health worker. How organizational factor such as reward from leader, manage the job description, incentive and etc. are important. This is consistent that the health worker need good environment to make sure they get what their need and achieve the target.<sup>6,25,26</sup>

There were limitations of this article, first, the total sample size only a part of total sample of National Human Resource of Health Study (RISNAKES) 2017, but this was enough to show the association with Structural Equation Modelling (S’EM). Second, RISNAKES conducted only one day activity observed of health worker, but based on their job description, one daily activity in one PHC similar with others, so the measurement enough to show the activity. Third, when measure the motivation and job satisfaction, the study used self-determined questionnaire, so the potential bias could happen, to reduce the possibility, the enumerators trained to explain answer the question.

## Conclusion

“Length of working life at current facility” influences the relationship motivation and job satisfaction of physician, dentist, nurse, midwife and pharmacist at PHC in Indonesia. Working condition/environment is important to optimize the relationship between motivation and job satisfaction.

**Policy Option:** The policy option based the result of this study are:

1. Develop and optimize working condition to manage length of working before and after 5 years working at PHC. The health worker should be given opportunity to move or stay to other facility with their intention periodically (after 5 years) based result of evaluation and monitoring.
2. Make motivation and satisfaction survey for health worker periodically to ensure their intention working at PHC

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