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Factors Influencing the Reporting Time of Online-Based Recording and Reporting Systems in Public Health Center of Semarang City

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Abstract

The target of timely reporting of SP3 online in Semarang City in the first quarter of 2017, amounted to 72% of Public Health Centers on time. Quarter II of 2017 was 62%. This is not in accordance with the target set by the Semarang City Health Office, which is 80%. The purpose of the study was to determine the factors that influence the timeliness of monthly SP3 reporting in Semarang City. This is an observational analytic research with case-control design. The sample set was 14 cases and 14 controls. The research instrument used was structured questionnaire. The results showed age factor (p value = 0.018; OR = 10.8), incentive (p value = 0.023; OR = 9.1), workload (p value = 0.008; OR = 13.4), leader support (p value = 0.008; OR = 15), supporting facilities (p value = 0.033; OR = 13) influenced the timeliness of SP3 reporting and years of service factor (p value = 0.7; OR = 1.8), computer skills (p value = 0.55; OR = 2.07), education (p value = 1; OR = 1.4), job training (p value = 0.5; OR = 2.07), and co-worker support (p value = 0.02; OR = 2.5) had no influence on the timeliness of SP3 reporting.

Abstrak

Target ketepatan waktu pelaporan SP3 online Puskesmas Kota Semarang triwulan I tahun 2017, sebesar 72% puskesmas tepat waktu. Triwulan II tahun 2017 sebesar 62%. Hal ini tidak sesuai dengan target yang ditetapkan oleh Dinas Kesehatan Kota Semarang, yaitu 80%. Tujuan penelitian untuk mengetahui faktor yang mempengaruhi ketepatan waktu pelaporan Sistem Pencatatan Puskesmas (SP3) Bulanan Kota Semarang. Jenis penelitian adalah observasional analitik dengan rancangan case control. Sampel yang ditetapkan sebesar 14 kasus dan 14 kontrol. Instrumen penelitian berupa kuesioner terstruktur. Hasil menunjukkan faktor umur (p value=0,018; OR=10,8), insentif (p value=0,023; OR=9,1), beban kerja (p value=0,008 ; OR=13,4), dukungan pimpinan (p value=0,008; OR=15), fasilitas pendukung (p value=0,033; OR=13) mempengaruhi ketepatan waktu pelaporan SP3 dan faktor masa kerja (p value=0,7; OR=1,8), kemampuan teknik komputer (p value=0,55; OR=2,07), pendidikan (p value=1; OR=1,4), pelatihan kerja (p value=0,5; OR=2,07), dan dukungan rekan kerja (p value=0,02; OR=2,5) tidak mempengaruhi ketepatan waktu pelaporan SP3.

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INTRODUCTION

The Public Health Center (*Puskesmas*) as the Technical Implementation Unit of the Health Office has the responsibility of administering health efforts for the first level in each of its work areas in providing excellent service to the community to realize national health development goals, namely the highest degree of public health. To make this happen, Public Health Centers (*Puskesmas*) are supported by the Public Health Center Management Information System (*Sistem Informasi Puskesmas / SIMPUS*) in an effort to support the Public Health Center (*Puskesmas*) program as the first level health provider. Public Health Center (*Puskesmas*) becomes a primary data source from a health information system that plays an important role in regional health information systems so that the improvement of the quality of the health information system starts from the Public Health Center (*Puskesmas*) as a basic service unit in producing health data.

SIP (*Sistem Informasi Puskesmas* = The Public Health Center Information System) is an order that provides information to assist the decision-making process in carrying out Public Health Center (*Puskesmas*) management in achieving its activity objectives. This definition is stated in the Minister of Health Regulation Number 75 of 2014 concerning Public Health Centers. Every Public Health Center (*Puskesmas*) is required to carry out Public Health Center information systems both electronically and non-electronically. *SP3* (*Sistem Pencatatan dan Pelaporan Puskesmas* = Recording and Reporting Systems of Public Health Center) is a part of the regency/city health information system. In organizing *SIP*, the Public Health Center (*Puskesmas*) must submit a report periodically to the regency/city health office. Public Health Center (*Puskesmas*) activity report is a source of data from reporting priority health data held through data communication (Soemitro, 2016).

The report of the evaluation conducted by the Health Metric Network-WHO in 2007 which aimed to assess decision making based on health data from the National Health Information System shows the score of health information data source components which includes reporting mandatory health data in health facilities with a score of 51% or still not support as a basis for good decision making. Based on the Data and Information Center of the Ministry of Health in 2015, the *SP3* reporting percentage with the assessment component in the form of reporting variable filling and the timeliness of monthly, quarterly data reporting and general data from 34 provinces in Indonesia. The highest variable ranking and timeliness of reporting were occupied by the Bangka Belitung Islands Province (84.28%) and the lowest was occupied by West Papua Province (27.28%). Whereas for Central Java Province ranked ninth with a percentage of 86.62%.

The results of observations made by researchers at the Semarang City Health Office regarding the coverage of *SP3* reporting Public Health Centers in the Semarang City Health Office's work area, Semarang City Health Office initiated the development of computerized *SIMPUS* in 2002 with the development of *SIMPUS* facilitated by the Semarang City Health Office. The developed *SIMPUS* is an information system that helps record and report patient services from patients to patients until they return home.

All Public Health Centers (*Puskesmas*) in the working area of the Semarang City Health Office have conducted *SP3* Reporting using online reporting through the *SIMPUS15* application. There are 15 variable reporting items that must be reported every 5th of the month to the Health Promotion and Health Information Section of the Semarang City Health Office. Online monthly *SP3* reporting is considered to be on time if sent without exceeding the required time limit and complete filling of variables. All 15 variables in Monthly *SP3* Reporting must be filled in completely and sent before the 5th of each month.

The results of *SP3* reporting coverage in the first quarter of 2017 found *SP3* reporting coverage there were 72% or 27 Public Health Centers (*Puskesmas*) that reported monthly *SP3* on time while the remaining 27% or 10 Public Health Centers (*Puskesmas*) still did not report. This still did not meet the targets set by the Semarang City Health Office, which was expected that 85% of the total Public Health Center (*Puskesmas*) in the Semarang City reports on a timely basis each month. The results of reporting coverage in the second quarter, namely the period April-June 2017, there were 62% or 23 Public Health Centers (*Puskesmas*) that report monthly *SP3* reporting on time, the remaining 38% or 14 Public Health Centers (*Puskesmas*) had not reported due to filling in reporting variables that have not been completely filled. This number decreased compared to the previous quarter.

The research results from Devi (2014) showed motivation and supervision had an effect on the completeness of the Posyandu (*Pos Pelayanan Terpadu* or Integrated Service Post) reporting records. Based on research conducted by Santoso (2009) at Blora Regency Health Office, it was shown that there was a significant relationship between the date of admission report and education level. Research showed that officers with senior high school education levels report an average of 4 days faster than officers with junior high school education levels and officers

with senior high education level on average report 18 days faster than officers with junior high school level. The number of *SP3* officers also has a positive effect on the speed of reporting (Santoso, 2009). The purpose of this study was to determine the factors that influence the monthly *SP3* Online reporting time at the Public Health Center (*Puskesmas*) in Semarang City.

METHODS

The design type of this study is an observational analytic study with a case-control approach. Data collection techniques used were interviews and questionnaires. The data sources used in this study was primary data sources from the Semarang City Health Office, while secondary data was obtained from interviews and questionnaires by 28 Public Health Centers (*Puskesmas*) divided into 14 Public Health Centers (*Puskesmas*) as sample cases and 14 Public Health Centers (*Puskesmas*) as control samples. Case samples were Public Health Center (*Puskesmas*) with *SP3* Online reporting time that exceeds the deadline in the second quarter of 2017. While the control sample was the Public Health Center (*Puskesmas*) that reports *SP3* Online on time in Quarter II 2017. Validity and reliability testing in this study was conducted at Public Health Center (*Puskesmas*) in Semarang City by distributing questionnaires. A questionnaire trial was conducted on 7 Public Health Center (*Puskesmas*) coordinators. Data analysis was performed univariately to describe the characteristics of each research variable and bivariate analysis using Chi-square test.

RESULTS AND DISCUSSION

Based on *SP3* Online reporting coverage data in Quarter II obtained from the Semarang City Health Office, it is known that respondents who were the sample cases in this study were Public Health Centers (Puskesmas) that had not met the SP3 Online reporting time target set at 14 Public Health Centers (Puskesmas) with a percentage of

Table 1. Distribution of Respondents Based on the Characteristics of the Public Health Center (*Puskesmas*) with the Online Based *SP3* Reporting System in Semarang City

Variable	Category	%	N
Timeliness of Reporting	Not on time	50	14
	On time	50	14
Years of service	<15 years	42.9	12
	≥15 years	57.1	16
Age	<42 years old	60.7	17
	≥42 years old	39.3	11
Computer Skills	Insufficient	3.6	1
	Sufficient	96.4	27
Education	High school	32.1	9
	Bachelor/Diploma	67.9	19
Job Training and Evaluation	Insufficient	3.6	1
	Sufficient	96.4	27
Incentive	Insufficient	44.8	13
	Sufficient	51.7	15
Workload	Heavy	50	14
	Light	50	14
Motivation	Insufficient	0	0
	Sufficient	100	28
Leader Support	Insufficient	42.9	12
	Sufficient	57.1	16
Coworker Support	Insufficient	25	7
	Sufficient	75	21
Facilities	Inadequate	28.6	8
	Adequate	71.4	20

Table 2. Bivariate Analysis Results (Association between Independent Variables and Scope of Youth Care Public Health Center (*PKPR* or *Pelayanan Kesehatan Peduli Remaja*) in Semarang Public Health Center (*Puskesmas*).

Variable	Case		Control		Total		P Value	OR 95% CI
	N	%	N	%	N	%		
Years of service								
<15 years	9	64.3	7	50	16	57,1		
≥15 years	5	35,7	7	50	12	42,9	0,7	1,8 (0,3-8,1)
Age								
<42 years old	12	85,7	5	35,7	17	57,1		
≥42 years old	2	14,3	9	64,3	11	42,9	0,018	10,8 (1,6-68,9)
Education								
High School	4	28,6	5	35,7	9	32,1		
Diploma/Bachelor	10	71,4	9	64,3	19	67,9	0,5	0,7 (0,14-3,5)
Computer Skills								
Insufficient	1	7,1	0	0	1	3,6		
Sufficient	13	92,9	14	100	27	96,4	0,5	2,07 (1,4-3,07)
Job Training and Evaluation								
Insufficient	1	7,1	0	0	1	3,6		
Sufficient	13	92,9	14	100	27	96,4	0,5	2,07 (1,4-3,07)
Incentive								
Insufficient	11	78,6	4	28,6	15	53,6		
Sufficient	3	21,4	10	71,4	13	46,4	0,023	9,1 (1,6-5,1)
Workload								
Heavy	11	78,6	3	21,4	14	50		
Light	3	21,4	11	78,6	14	50	0,008	13,4 (2,2-81,7)
Motivation								
Insufficient	0	0	0	0	0	0		
Sufficient	14	100	14	100	28	100	NA	NA
Leader Support								
Insufficient	10	71,4	2	14,3	12	42,9		
Sufficient	4	28,6	12	85,7	16	57,1	0,008	15 (2,2-99,5)
Co-worker support								
Insufficient	4	28,6	3	21,4	7	25		
Sufficient	10	71,4	11	78,6	21	75	1	1,4 (0,2-8,2)
Facilities								
Inadequate	7	50	1	7,2	8	28,5		
Adequate	7	50	13	92,8	20	71,5	0,033	13 (1,3-128)

50 %. While the respondents who were the control samples in this study were Public Health Centers (Puskesmas) that were on time in reporting online SP3 as many as 14 Public Health Centers (Puskesmas) with a percentage of 50%.

Table 1 shows 12 respondents with years of service below the average (<15 years) with a percentage of 42.9% and respondents with ears of service above average (≥15 years) as many as 16 respondents with a percentage of 57.1%. Age characteristics of respondents were dominated by respondents with age below average (<42 years) as many as 17 respondents with a percentage of 60.7% and the rest were respondents with ages above the average (≥42 years) as many as 11 respondents with a percentage of 39.3 %. The characteristic of the Public Health Center (*Puskesmas*) respondents was based on computer skills possessed, namely 1 respondent (3.6%) with insufficient computer skills and 27 respondents with good computer skills (96.45%). Judging from the last education taken by the respondents, there were 9 respondents (32.1%) with high school / vocational education and 19 respondents (67.9%) with Diploma/Bachelor education.

Respondents with the results of training and work evaluations that were insufficient amounted to 1 respondent (3.6%) and 27 respondents (96.45%) with good job training results. Incentives provided by Public Health Centers to respondents with insufficient status amounted to 13 respondents (44.8%) and incentives with good status of 15 respondents (51.7%). The workload status in the study respondents is similar between case respondents and controls where there were 14 respondents (50%) with heavy workload and 14 respondents (50%) with a light workload. All respondents in this study had good motivation status with 28 respondents (100%). Respondents with insufficient leader support in this study amounted to 12 respondents (42.9%) and respondents with good leader support amounted to 16 (57.1%). Respondents with support from less than 7 respondents (25%) and 21 respondents (75%) with good co-workers support. The work facilities at the Public Health Center (*Puskesmas*) where the research was conducted in this study were 8 respondents (26.8%) who thought that the facilities were inadequate while there were 20 respondents (71.4%) arguing that the facilities were adequate to support work as coordinators of *SP3* reporting.

It can be seen in Table 2 that the years of service had p-value = 0.7> α (0.05) with a confidence level of 0.3-8.1 (includes number 1), meaning that statistically, the years of service of the Monthly *SP3* Online Reporting Coordinator had no effect on the timeliness of *SP3* reporting. Whereas the age factor of Monthly Online *SP3* reporting coordinator had p-value = 0.018 <α (0.05) with a confidence level of 1.6-68.9 (not including number 1), meaning that statistically, the *SP3* coordinator's age influenced the timeliness of *SP3* reporting. The magnitude of the risk can be seen in the OR value, from the output obtained OR = 10.8, meaning that Public Health Centers that had *SP3* reporting coordinators less than 42 years old had a 28 times risk of not reporting monthly *SP3* on time than Public Health Centers that had officers aged more than 42 years old.

The results of bivariate analysis on educational factors showed the value of p-value = 0.5 > α (0.05) with a confidence interval of 0.14-3.5 (including number 1), meaning that statistically *SP3* reporting coordinator education had no effect the timeliness of reporting *SP3*. While the results of the chi-square test on computer skills showed the large p-value = 0.05> α (0.05) with a confidence interval of 1.4-3.07 (including number 1) so that the variable of computer skills of *SP3* reporting coordinator had no effect on the timeliness of *SP3* reporting.

The results of bivariate analysis on the factors of job training and evaluation showed p-value = 0.5> α (0.05) with a confidence interval of 0.4-3.07 (including number 1), which means statistically the SP3 reporting coordinator's job training and evaluation had no influence on the timeliness of SP3 reporting. Whereas in the factor of incentives given to the Monthly Online SP3 reporting coordinator, p-value = 0.023 <α (0.05) with a confidence level of 1.6-5.1 (does not include number 1), meaning that SP3 coordinator incentives statistically influenced the timeliness of SP3 reporting time. The magnitude of the risk can be seen in the OR value, from the output obtained OR = 9.1, meaning Public Health Center (Puskesmas) with an intensive SP3 reporting coordinator that was insufficient had a risk 9.1 times did not report monthly SP3 on time than the Public Health Center (Puskesmas) that had sufficient incentive of SP3 reporting coordinator.

The results of the analysis on the workload factor in the SP3 reporting coordinator, p-value = 0.008 <α (0.05) with a confidence level of 2.2-81.7 (not including number 1), meaning that SP3 coordinator workload statistically influenced timeliness of SP3 reporting. The amount of risk can be seen in the OR value, from the output obtained OR = 13.4, meaning Public Health Center (Puskesmas) with SP3 reporting coordinator who had a heavy workload of 13.4 times does not report monthly SP3 on time than Public Health Centers that have SP3 reporting coordinator who had a light workload. Whereas in the support factor given by the leader to the Monthly Online SP3 reporting coordinator, p-value = 0.008 <α (0.05) with a confidence level of 2.2-99.6 (not including number 1), meaning that statistically

the support of the leadership influenced timeliness of SP3 reporting. The magnitude of the risk can be seen in the OR value, from the output obtained OR = 15, meaning Public Health Center (Puskesmas) with SP3 reporting coordinator who had leadership support that was not 15 times less risky reporting monthly SP3 on time than the Public Health Center (Puskesmas) that has an SP3 reporting coordinator have sufficient leadership support

The analysis results from co-worker support factors had p value = 1> α (0.05) with a confidence level of 0.2-8.2 (including number 1), meaning statistically co-worker support given to the Monthly Online SP3 Reporting Coordinator had no influence on the timeliness of SP3 reporting. Whereas in the facilities factor, the Monthly Online SP3 reporting coordinator had p-value = 0.033 <α (0.05) with a confidence level of 1.3-128 (not including number 1), meaning that statistically, the supporting facilities for SP3 reporting influenced the timeliness of SP3 reporting. The magnitude of the risk can be seen in the OR value, from the output obtained OR = 13, meaning that Public Health Centers that have SP3 reporting support facilities that were less 13 times risky did not report monthly SP3 on time than Public Health Centers that had good SP3 reporting support facilities.

The experience gained by someone is found from various kinds of things that have been performed. One measure of work experience is the work period of an employee. The researcher assumes that the longer the years of service of the employees of the Public Health Center (Puskesmas), the more experienced in adapting to other employees and with the dependents of the tasks given. In this study, the statement was not proven. The statement was supported by bivariate analysis data that prove that the SP3 coordinator's working period had no influece on the monthly SP3 Online reporting time by the Public Health Center (Puskesmas).

The age of a person signifies the length of life's journey and experience gained during life. The results showed that the age of the SP3 coordinator was one factor and there was a relationship between the age of the SP3 coordinator of Public Health Center (Puskesmas) and the timeliness of SP3 Monthly Reporting of Public Health Center (Puskesmas). This research is not in line with Auliani's (2012) research which stated that there was a relationship between employee age and work productivity. There is no provision regarding the age of employees assigned to become SP3 reporting coordinator from Semarang City Health Office because those assigned to become SP3 Reporting coordinator of Public Health Center (Puskesmas) is an employee who is capable of carrying out it and the appointment of the Head of the Public Health Center (Puskesmas) to employees who are considered capable and the responsibility to assume responsibility as the SP3 reporting coordinator of Public Health Center (Puskesmas) regardless of the age of the employee.

Computer skills are the basis of SP3 Online reporting that must be owned by the SP3 coordinators to be able to do their job. The computer skills mastered by the SP3 coordinators come from self-taught and work experience from the jobs that are their responsibility and prior knowledge about computers. In this study, the SP3 Online reporting coordinator's computer skills factor did not influence the timeliness of SP3 online monthly reporting as evidenced by bivariate analysis. Employees at the Public Health Center (Puskesmas) in the work area of the Semarang City Health Office have used computers as a tool to support their work. Computers are used as a tool to input and process data for the benefit of the Public Health Center (Puskesmas). The computerized implementation of SP3 online reporting at the Public Health Center (Puskesmas) in the working area of the Semarang City Health Office is intended to simplify and accelerate SP3 reporting from each Public Health Center (Puskesmas). For SP3 Online reporting, a computerized system has been implemented since 2002 and continues until now with the latest online SP3 reporting system based on a web browser called SIMPUS13. The interface and use of SIMPUS 13 are made easy so that users do not feel troubled when inputting items that are part of the monthly SP3 Online coordinator's work assignments. The SIMPUS13 interface is easy and simple, making the SP3 coordinator quickly and easily to understand how to use SIMPUS13 so that there are no difficulties in using and applying it to every Public Health Center (Puskesmas) in Semarang City.

With education, someone is able to learn and be prepared to face the demands of work that will be faced in the future. With education, someone will gain knowledge and skills that will be used in the world of work. In this study, there were 9 respondents with the last education of high school / vocational school and 19 respondents with the last education of Diploma / Bachelor. The results of the bivariate analysis indicated the level of education was not influencing the timeliness of *SP3* reportingThis study is not in line with research by Ningrum et al (2013) which examined that the level of education and training had a significant influence on employee performance. There are no special requirements, especially from the Semarang City Health Office regarding *SP3* reporting coordinator's education qualifications at the Public Health Center (*Puskesmas*) in Semarang City. The educational background of the coor-

dinator of *SP3* Online reporting varies, from high school graduates, midwifery, engineering, public health, economics, medical records, and so on. The assignment as a *SP3* Online reporting coordinator is a non-main task and function so that it is not a top priority of Public Health Center (*Puskesmas*) employees who carry out that responsibility. Job placement as an *SP3* Online reporting coordinator is regulated by the head of the Public Health Center (*Puskesmas*) by taking into account the ability and willingness of Public Health Center (*Puskesmas*) employees who are considered potential.

In bivariate analysis, incentive is a factor that influenced the timeliness of monthly *SP3* online reporting. This research was supported by the research results by Wirapuspita (2013) that material and non-material incentive along with other benefits can increase motivation and minimize drop out from Posyandu cadres. Incentive functions effectively to support the work of employees who are carried out continuously and to issue the maximum potential of employees to improve work performance. The incentives provided consist of two types, namely material and non-material. These material incentives are in the form of bonuses and non-material rewards. This reward in the form of material and non-material incentives is expected to make employees feel happy and satisfied with their work and their performance increases. There is no specific regulation from the Public Health Center (*Puskesmas*) regarding the intensive provision of *SP3* Online reporting coordinators. There is a Public Health Center (*Puskesmas*) that does not provide incentives for either non-material incentives or material incentives. Some Public Health Centers only provide non-material intensive materials such as praise and appreciation about the work results of the *SP3* online reporting coordinator while the rest there are several Public Health Centers providing incentive materials such as transportation money and bonuses to support and appreciate the work of *SP3* online reporting coordinator.

In the field of human resource management, training and development are fields related to organizational activities that aim to improve the performance of individuals and groups within an organization. Training and development help employees achieve better performance and help organizations achieve their goals (Kennedy, 2009).

In this study, job training factor did not become one of the factors that influence the reporting timeliness of *SP3* Online of Public Health Center (*Puskesmas*). This result is not in line with research by Alhudhori (2018) which stated that the job education and training carried out had a positive influence on the performance of Public Health Center (*Puskesmas*) employees. Public Health Center (*Puskesmas*) employees who were given the responsibility to become the *SP3* Online reporting coordinator alternately since the beginning of *SIMPUS13* were held throughout the Public Health Center (*Puskesmas*) of Semarang City Work Area. Not all *SP3* Online reporting coordinators of Public Health Centers followed initial training from online *SP3* Reporting. Those who did not take part in the initial training performed self-learning *SP3* Online reporting or through previously coordinators. Semarang City Health Services often did not conduct training on the use of *SIMPUS13*. Training is held if there are changes and new information related to SIMPUS13. Every month regular meetings and evaluations are held for all *SP3* Online reporting coordinators of Public Health Center (*Puskesmas*) at the Semarang City Health Office. The latest changes and training held in January were related to changes in *SIMPUS13* to SIP which began to be performed as early as 2018.

In a job, someone must have felt the workload. According to Maya (2013) the definition of workload as a concept arises due to limited capacity in processing information. Workload arises because of a mismatch between the capacity of a person and the work that is the responsibility. In this study, workload is a factor that influences monthly *SP3* Online reporting time and there is an effect of workload on monthly *SP3* Online reporting time. This research is in line with the research conducted by Indriyani (2009) which proved that workload is an inhibiting factor that influences the implementation of monthly reports on Public Health Center (*LB4*) activities at the Gondokusuman II Public Health Center (*Puskesmas*). Responsibilities as *SP3* Online reporting coordinator of Public Health Center (*Puskesmas*) is not a task force of Public Health Center (*Puskesmas*) employees but rather a side task given by the head of the Public Health Center (*Puskesmas*) to employees who are considered competent. Side tasks at Public Health Center (*Puskesmas*) are not clearly defined, employees who are considered capable of being able to be burdened with tasks that sometimes exceed their abilities, even sometimes the burden often exceeds that of main task and function which is their responsibility. This is because there are still limitations in the number of existing Public Health Center (*Puskesmas*) employees, so there is still a buildup of tasks that must be done by each employee of the Public Health Center (*Puskesmas*).

Every Public Health Center (*Puskesmas*) employee has diverse motivations in completing each work. In this study, all Public Health Center (*Puskesmas*) employees have good motivation status at work, because all Public Health Centers in Semarang City set good work standards, such as online

presence and work targets and strict sanctions so that every Public Health Center (*Puskesmas*) employee always has good work motivation. In addition to the assessment of the motivation variable of the *SP3* reporting coordinator, most respondents took the option to agree on filling out the questionnaire so that all the results of the *SP3* reporting coordinator had good motivation. Interviews conducted were also unable to reveal motivational status because motivational variables included self-assessments that were sensitive enough for others to know.

A leader is responsible for achieving the goals of a group/organization. Leader support is needed in terms of planning, organizing, developing and supervising the performance of individuals in the organization and greatly determines the success of individual performance because management has the highest authority in the development of information systems (Widyasari & Suardikha, 2015).

The results of bivariate analysis showed that the factors of leader support had an effect on the reporting time of *SP3* Online of Public Health Center (*Puskesmas*). The results of this study relate to research conducted by Rahayu (2012) where the influence of the leadership of the head of Public Health Center (*Puskesmas*) resulted in a lack of achievement of the performance of the Public Health Center (*Puskesmas*). Each Public Health Center (*Puskesmas*) in the Work Area of the Semarang City Health Office has a head of Public Health Center (*Puskesmas*) whose duty is to supervise and evaluate the workings of *SP3* Online reporting per month. The head of the Public Health Center (*Puskesmas*) is also tasked with motivating and supporting every employee of the Public Health Center (*Puskesmas*) to achieve the work target of the Public Health Center (*Puskesmas*). Some *SP3* Online reporting coordinators feel that the head of the Public Health Center (*Puskesmas*) lacks understanding of the abilities and competencies of the employees who are partners in the Public Health Center (*Puskesmas*). The division of tasks given by the head of the Public Health Center (*Puskesmas*) is not in accordance with the basic competencies possessed by Public Health Center (*Puskesmas*) officers, so sometimes it becomes a burden, especially the burden of the main task or task force which is the responsibility mainly from the *SP3* Online coordinator of Public Health Center (*Puskesmas*).

The achievement of the work of an organization can not be separated from the cooperation of every member involved in it. Relationship with coworkers is an important source of providing support to colleagues and a positive effect on employee satisfaction (Madlock & Booth-Butterfield, 2012). The results of the bivariate analysis show there was no relationship between peer support for the timeliness of reporting of *SP3* Online of Public Health Center (*Puskesmas*). Task as *SP3* Online reporting coordinator of Public Health Center (*Puskesmas*) is inseparable from the support of co-workers related to fields that are mandatory of *SP3* Online reporting items. The *SP3* Online reporting coordinator must collect results from Public Health Center (*Puskesmas*) activities, especially those that become mandatory items for monthly *SP3* Online reporting. If there is a delay in reporting results from colleagues who are responsible for the existing program, *SP3* reporting will also be incomplete and declared late, so that the support of colleagues is important for the smooth monthly *SP3* Online reporting.

Supporting facilities are things that support the smooth implementation of work to achieve work goals, including buildings, workspaces and process equipment (software and hardware) and supporting services (transportation and communication). The results of the bivariate analysis indicated that supporting facility is factor that influences the timeliness of reporting of *SP3* Online of Public Health Center (*Puskesmas*). This research is in accordance with research conducted by Putri (2013) where SIMPUS supporting facilities such as computers and internet networks have an effect on the reporting performance of *SP3* online reporting of Public Health Center (*Puskesmas*). Constraints often faced by *SP3* Online reporting coordinators are supporting facilities in the form of computers and the internet. Only a few Public Health Centers provide IT space to input *SP3* reporting data and other related reports. Public Health Centers that do not provide IT space still provide computers connected to the internet in the registration section and can also be used for reporting and recording Public Health Centers after hours of service. The Semarang City Health Office also still does not have a fixed SIMPUS server, sometimes the server functions are transferred to other programs, thus disrupting the monthly *SP3* online reporting process. Every Public Health Center (*Puskesmas*) has an internet connection provided by its own health center. Sometimes Public Health Centers also experience problems in internet connection errors, and a long repair time with a range of about one to two days until they are completely repaired.

CONCLUSION

It can be concluded that the age factor of the *SP3* coordinator, incentive, workload, leader support and supporting facilities influenced the timeliness of monthly *SP3* Online reporting of Public Health Center (*Puskesmas*). While the years of service, computer skills, job training and evaluation, and co worker support had no influence on the ti-

meliness of monthly *SP3* online reporting of Public Health Center (*Puskesmas*).

There is a need for hearings from each Public Health Center (*Puskesmas*) to find out opinions and input from the *SP3* reporting coordinator and to provide a special server for Internet-based Monthly *SP3* online reporting. In addition, it is necessary to conduct independent training by the Public Health Center (*Puskesmas*) regarding the operation of Monthly Online-based *SP3* and the establishment of the *SP3* Online Reporting Team.

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