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# **Factors Associated With Needles Stab Wounds to the Village Midwife in Mojokerto District**

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**Abstract**— Village midwife in Mojokerto in providing services acts inject stab wounds at risk of exposure as a result of syringes and needles puncture wounds impact on the risk of infection. This study aimed to analyze factors associated with syringe stab wounds on the village midwife. This research is a quantitative and qualitative research to look for a causal relationship. This study was conducted in 27 health centers in the district of Mojokerto in October 2014 to February 2015. The populations in this study were all midwives in Mojokerto. Sample retrieval technique used is random sampling where the sample sizes in this study as many as 74 midwives. The data were analyzed by using logistic regression statistical test and doing focus group discussion additional data to dig deeper. These results indicate that experienced midwives needle puncture wounds 39 people (52.7%) and no puncture needles injured 35 people (47, 3%). Besides, it also showed a significant relationship between the stab wounds syringe with the knowledge factor ( $P = 0.043$ ), tenure ( $P = 0.016$ ), the availability of SOP (0.000), the availability of PPE(0,001), the availability of safety box (0,024), the application of SOP (0.043), use of PPE (0,001), nonrecapping (0.043), use of safety box (0.007) and supervision (0.043). The conclusion that the factor of knowledge, years of service, availability of SOP, the availability of PPE, availability Safety box, the application of SOP, use of PPE, nonrecapping, utilization and monitoring safety box has a significant relationship premises syringe stab wounds on the village midwife.

**Keywords**— Needles Stab wounds, Village Midwife

## **I. INTRODUCTION**

Efforts to bring health program community outreach resulting in increased utilization of health care facilities in rural communities, it makes the demand management of occupational health and safety program is getting higher. Village midwives as one of the health workers in providing health services through the Village Maternity Cottage(Polindes) or Integrated Service Post prioritizing activities promotive, preventive and curative efforts to perform basic treatment and aid delivery (MOH, 2002). Village midwife as the basic health workers in the community are able to provide quality services including implementation and development of occupational health and safety programs in providing services (Sofyan, 2006). Health workers in providing services have the potential risk of puncture wounds needles or other sharp objects, it can be brought with blood pathogens such as hepatitis B virus (HBV), hepatitis C virus (HCV), HIV (human immunodeficiency virus), and twenty more Other pathogens that impact infection where the chances of contracting Hepatitis B, Hepatitis C and HIV (Zewdie, 2013).

According to the CDC in the United States lists following percentages to the level of the injury studies with data collected 1995-2007: due to needle stick injuries include: after disposal (in transit disposed of, the disposal of which is not true), before discharge (closing needle, for cleaning), usage (specimen retrieval, installation transfusion, exposed to other workers, the release of the needle).

CCOHS 2014 states that the cause of the puncture needle injuries and other sharp objects that occur in the United States in the period 1995 to 2007 is due to needling after the disposal of 22%, prior to the disposal of 19% and over 52% usage. While puncture wounds from sharp objects other before the discharge by 3%, before being discharged to 15% and over 70% usage. Each year as many as 12 billion injections performed around the world, and every year as many as 3 million people affected by needle puncture wounds, besides that as many as 2 million of the 35 million health care workers in the world are exposed coetaneous infections per year. The United States is estimated to health care workers in the hospital suffering from stab wounds and wounds caused by needles other sharp medical instruments as much as 385,000 cases per year, or 1,000 cases per day (WHO, 2002).

In Indonesia, by Josep research conducted in 2005 to 2007 as contained in Kepmenkes No. 1087/Menkes/SK / VIII / 2010 on Standard Health And Safety In Hospitals, noted that the number of work accidents as a result of stab wounds syringe reaches 38-73% of the total health care workers (MoH RI, 2010). A preliminary assessment carried out by interviewing 10 midwives of 5 health centers in Mojokerto regency is known that there are 80% of midwives who've needle stick, so it is necessary to evaluate the

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incidence of needle puncture wounds on midwives in Mojokerto by approaching the system from input, process and output and feedback (recommendation). The general objective of this research is to analyze and determine the factors associated with needle puncture wounds on midwives in Mojokerto.

## II. RESEARCH METHODS

This study uses an analytical survey research using the design (cross-sectional). The population in this study is the village midwife in the district of Mojokerto as many as 304 midwives. The sampling technique used was simple random sampling with a sample size of 74 midwives. The data obtained are derived from primary and secondary data. Primary data obtained from measurements by filling questionnaires and observation, while secondary data obtained from the records that exist in the health centers and Polindes. Data were analyzed using regression logistic test. The independent variable in this study is the knowledge, work period, availability SOP, availability of PPE, Availability Safety box, Application of SOP, use of PPE, efforts nonrecapping syringes and Utilization safety box, and supervision while the dependent variable is the incidence of stab wounds syringe. The results are expected to be used as a policy recommendation in occupational health and safety program for midwives through focus group discussion. Discussion focus group is a form of discussions designed to bring information about the wishes, needs viewpoints, beliefs and experiences of participants desired. (Astridya, 2013).

The FGD implementation procedures, namely:

Forming Team

Selecting and Setting a Place

Setting up Logistics

Recruitment of participants comprised two groups, namely: Village midwives, Midwife coordinator

Implementation of the FGD

Data analysis and preparation of the FGD by writing topics or issues found from the results FGD and discuss topics or issues that disclosed together with a team of researchers.

## III. RESULTS

*A. Knowledge Village Midwife Distribution Relationship With Stab Wounds Needles  
Results Of The Cross Table Of Technical Knowledge Midwife Injected With A Hypodermic Needle Puncture Wounds Can Be  
Seen In Table 1 Below:*

Table 1 Results of crosstabs and logistic regression between technical knowledge stab wounds injected with a syringe in a village midwife in Mojokerto 2015

Knowledge	Needles Stab wounds				Totally		p
	Yes		No				
	n	%	n	%	n	%	
Good	11	37,9	18	62,1	45	100	0,043
Less	28	62,2	17	37,8	45	100	
Totally	39	52,7	35	47,3	74	100	

Table 1 shows that the technical knowledge to inject midwife with good knowledge injecting technique consisted of 11 (37.9%) had suffered stab wounds syringe dan 18 (62.1%) had never suffered stab wounds syringe, whereas midwives with less knowledge consists of 28 (62.2%) had suffered stab wounds syringe and a number of 17 (37.8%) had never suffered stab wounds syringe. Based on statistical test showed the value of  $p = 0.043$ , due to the significant value of  $p = 0.043 < 0.05$ , showed a significant relationship between the variables of technical knowledge midwife injected with a syringe stab wounds. The conclusion of the activities Focus group discussion group on knowledge engineering midwife injecting-related injuries that needling technique midwives feel inject knowledge already good but in practice they are often based on experience, routine and sometimes in a hurry, leaving the existing theories and procedures, the following Focus group discussion group quote midwife:

Am: "actual knowledge injecting techniques we know better preparation tools, implementation inject and after the injection, the needle puncture wounds usually happens when we rush to act, one of the factors that served many or the patient is not in a state of

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calm"

Ar: "yes almost the same as ....., just maybe that often occurs in the field, because based experience and routine so that we sometimes do not see the procedure"

Cr: "If I personally still, sometimes inject our technical knowledge forget but because it was a routine and based on experience and condition of the limited means of supporting so that we sometimes do not theoretical, usually condition needle stick fitting state of panic so that emergency conditions"

Ll: "I think we need special training to the injection procedure, in order to prevent infection that may need to be trained again, need training"

The conclusion of the activities Focus group discussion group coordinator midwife about technical knowledge related to the injecting needle puncture wounds that although already know the technique of injecting, but they still have a good time needling wound preparation and execution of the disposal process it is due to hastily rushed so that sometimes does not correspond to procedure. The following excerpt midwife Focus group discussion group coordinator:

Sw: "the actual technique of injecting theory we know but still occur needle puncture wounds, could not only when injected, probably preparation, or time management tools, cleaning tools after we do the process, I think it could also be included as a needle puncture wounds"

Nr: "..... ever pierced, when the patient was much, whereas we alone, so hurry-hurry, finally, the wait person cries, his cry yes finally punctured, but there is a feeling in the hearts of not good so yes, because if not in a hurry the possibilities are punctured

Sw: "... it is no training, with current conditions like this we're always introduced continuously, be heard continuously, infectious, so our own fear, our fear of it ..... with our procedures that need to be taken to avoid infectious because we often rely experience and routines"

### B. Distribution Relationship Work Period Village Midwife with Needles Stab Wounds

Table 2 Results of crosstabs and logistic regression test between working period with a syringe stab wounds  
n midwives in Mojokerto 2015

Work Period	Needles Stab wounds				Totally		p
	Yes		No				
	n	%	n	%	n	%	
≤ 5 Age Years	11	91,7	1	8,3	12	100	0,016
> 5 Age Years	28	45,2	34	54,8	62	100	
Totally	39	52,7	35	47,3	74	100	

Table 2 shows that the period of employment midwife <5 years consisted of 11 (91.7%) had experienced midwife syringe stab wounds and a number 1 (8.3%), midwife never suffered stab wounds syringe. While the village midwife with tenure > 5 years consisted of 28 (45.2%) had experienced midwife syringe stab wounds and a number of 34 (54.8%) had never experienced midwife syringe stab wounds. Based on statistical test showed the value of  $p = 0.016$ , due to the significant value of  $p = 0.016 < 0.05$  showed a significant relationship between the variables of midwives working lives with a needle puncture wounds. The conclusion of the activities Focus group discussion group about the village midwife-related work injuries needling is working lives, experiences mental readiness and independence midwives in providing services injection actions related to needle puncture wounds. The following excerpt Focus group discussion group midwife:

Am: "..... the needle puncture wounds usually happens when we rush to act, one of the factors that served many or the patient is not in a state of calm"

Km: "Yes, more than 5 years"

An: "The new 4-year"

Cr: "The youngest"

An: "if still usually tremors, especially if hurryand hasty"

En: "every day, if you run out injection like that before, because already the norm"



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The conclusion of the activities Focus group discussion group coordinator midwife about the work-related injuries that acupuncture needles puncture wounds that afflict midwife because in providing services performed by injecting action hastily rushed and conditions uncooperative patients. The following excerpt midwife Focus group discussion group coordinator:

Nr: "..... we are alone, waiting for the crowd... finally punctured, if not in a hurry may not puncture"

Nr: "we if not wrong every year ever pierced... sometimes with feelings of tension, was because we put too hastily"

Sn: "Yes like before... crying, yes hurry before"

### C. Availability SOP Distribution Relationship With Needles Stab Wounds

Table 3 Test results crosstabs between the availability of the SOP with the hypodermic needle puncture wounds *village* midwife in Mojokerto 2015

Availability of the SOP	Needles Stab wounds				Totally		p
	Yes		No				
	n	%	n	%	n	%	
Availability	7	25	21	75	28	100	0,000
Not Availability	32	69,6	14	30,4	46	100	
Totally	39	52,7	35	47,3	74	100	

Table 3 shows that the midwives who provide SOP consists of 7 (25%) had experienced midwife syringe stab wounds and a number of 21 (75%) have never experienced midwife syringe stab wounds, while midwives who do not provide the SOP comprises injecting of 32 (69.6%) had experienced midwife syringe stab wounds and a number of 14 (30.4%) had never experienced midwife syringe stab wounds. Based on statistical test showed the value of  $p = 0.000$ , due to the significant value of  $p = 0.000 < 0.05$ , showed a significant relationship between the variable availability of SOP with needle puncture wounds on midwives in Mojokerto regency. The conclusion of the activities Focus group discussion group about the availability of SOP midwife related to the needle stab wounds that midwives in providing services in villages are not all available polindes SOP injected because it was already available in the clinic and felt already experience in injecting action. The following excerpt Focus group discussion group midwife:

An: "... in fact there but we have been joint term, joint participating health centers, stew there but at the health center, we own it already knew, only not make polindes SOP in the workplace"

Cr: "although no sometimes as routine and experience almost every day, but we need to and must implement stew"

An: "..... never read just forgot, yes ... because this is where we do not provide"

Cr: "..... to our own. Apart from the existing SOP, as develops it should be renewed, the point like that."

The conclusion of the activities Focus group discussion group coordinator on the availability of SOP midwife injecting associated with needle puncture wounds that midwives in providing services in villages are not all available SOP inject polindes but there is a feeling because it is routinely performed and the experience thus does not provide the SOP. The following excerpt midwife Focus group discussion group coordinator:

Ss: "..... if the actual SOP entire has once but forgotten"

Lk: "Every midwife is expected to have a SOP, but not all have"

Kh: "yes midwife in addition to carrying out the management was that yes comes with existing theories. But sometimes we do not use the SOP but experience"

Sn: "if the health center there, mostly there but that in many villages that do not provide"

### D. Distribution Relationship Availability PPE Gloves With Needles Stab Wounds

The availability of personal protective equipment gloves come from the allocation of Mojokerto district health offices that are distributed through each clinic. Results of the cross table of availability of PPE gloves midwife with stab wounds syringe can be seen in Table 4.

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Table 4 Test results crosstabs between the availability of PPE gloves with syringe stab wounds on midwives in Mojokerto 2015

Availability of PPE Gloves	Needles Stab wounds				Total		p	OR
	Yes		No					
	n	%	n	%	n	%		
Availability	7	25,9	20	74,1	27	100	0,001	6,095
Not Availability	32	68,1	15	31,9	47	100		
Totally	39	52,7	35	47,3	74	100		

Table 4 shows that the midwives who provide personal protective equipment gloves consists of 7 (25.9%) had experienced midwife syringe stab wounds and a number of 20 (74.1%) had never experienced midwife syringe stab wounds, while midwives who do not provide personal protective equipment gloves consist of 32 (68.1%) had experienced midwife syringe stab wounds and a number of 15 (31.9%) had never experienced midwife syringe stab wounds. Based on statistical test showed the value of  $p = 0.001$ ,  $p = 0.001$  significance value  $< 0.05$ , showed a significant relationship between the variables of the availability of personal protective equipment glove with a needle puncture wounds on midwives in Mojokerto. The conclusion of the activities Focus group discussion group midwife about the availability of PPE gloves associated with needle puncture wound that is the availability of PPE gloves in all services provided by the health centers in accordance with the allocation of limited however because usually when a number less than the need to buy your own midwife. The following excerpt Focus group discussion group midwife:

Ll: "I think the equipment for its APD it also must be satisfied, as long as we limited this right, at least not as gloves... it should meet the needs"

St: "usually when discharged take to the clinic if there is, then if health centers run out take into offices"

Cr: "but sometimes yes depleted"

Am: "Sometimes yes purchasing their own"

The conclusion of the activities Focus group discussion group coordinator midwife about the availability of PPE gloves associated with needle puncture wound that is the availability of PPE gloves provided by the health centers in accordance with the allocation of limited and if less than the need to buy your own. The following excerpt midwife Focus group discussion group coordinator:

Lu: "earlier, that from the health centers we must less for it ...Yes we buy their own to protect ourselves, to gloves ..... of PHC is also limited."

Lk: "divided, yes of the medicine, drugs, devices, already divided each village midwife failure by so-so, so if you've exhausted that amount was, depending on the village midwife, buy their own or buy"

Sw: "that must be met in the inventory tool, not least because until now gloves limited.

### E. Distribution Relationship Availability Safety Box Or Sharp Container With Needles Stab Wounds

Table 5 Test results crosstabs between the availability of the safety box or container with sharp needles puncture wounds on midwives in Mojokerto 2015

Availability of the Safety Box	Needles Stab wounds				Totally		p
	Yes		No				
	n	%	n	%	n	%	
Availability	12	37,5	20	62,5	32	100	0,024
Not Availability	27	64,3	15	35,7	42	100	
Totally	39	52,7	35	47,3	74	100	

Table 5 shows that the midwives who provide the safety box or sharp container consisted of 12 (37.5%) had experienced midwife syringe stab wounds and a number of 20 (62.5%) had never experienced midwife syringe stab wounds, while midwives who do not provide the safety box or sharp container consisted of 27 (64.3%) had experienced midwife syringe stab wounds and a number of 15 (35.7%) had never experienced midwife syringe stab wounds. Based on statistical test showed the value of  $p = 0.024$ , due to the

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significant value of  $p = 0.024 < 0.05$ , showed a significant relationship between the variable availability of safety box or container with a sharp needle puncture wounds on midwives in Mojokerto.

The conclusion of the activities Focus group discussion group about the availability of midwives safety box or container that is associated with sharp needle puncture wounds that midwives in providing services injections they mostly do not provide the safety box or sharp container due to the availability of safety box or sharp container provided by health centers are still lacking, the difficulty of bringing safety box or container sharp and forgot to take at the time of service in the field. The following excerpt Focus group discussion group midwife:

Ar: "... sometimes it forgot to bring safety box, continue to use the place used needles was sober, usually it made it Mrs. you know, take it crackle"

St: "usually when discharged take to the clinic if there is, then if health centers run out take into offices"

Cr: "The first target it not the same, both our service to patients not same, so I say varies, sometimes it can be a safety box for two months, sometimes there is one month, maybe if averaged yes one month One"

The conclusion of the activities Focus group discussion group about the availability of a safety coordinator midwife or sharp container box associated with needle stab wounds that midwives most do not provide the safety box or sharp container obtained from health centers because the allocation is still less so that no safety box reuse or sharp container after full. The following excerpt midwife Focus group discussion group coordinator:

Lu: "...if for safety box as well, from the health center is also limited, sometimes using that again after the full"

Lk: "divided, yes of the medicine, drugs, devices, already divided each village midwife failure by so-so, so if you've exhausted that amount was, depending on the village midwife, buy their own, but we did not come to propose to his needs"

Sm: "... every time we are taking the same share imunization personel, can be two-two, we want to be involved in the proposal needs".

### F. Application of SOP Distribution Relationship With Needles Stab Wounds

Table 6 test results crosstabs between the applications of SOP stab wounds injected with a syringe in a village midwife in Mojokerto 2015

Applications of SOP	Needles Stab wounds				Totally		P
	Yes		No				
	n	%	n	%	n	%	
Applications	10	37	17	63	27	100	0,043
Not Applications	29	61,7	18	38,3	47	100	
Total	39	52,7	35	47,3	74	100	

Table 6 shows that the midwives are implementing SOP consists of 10 (37%) had experienced midwife syringe stab wounds and a number of 17 (63%) have never experienced midwife syringe stab wounds, while midwives are not implementing SOP comprises injecting of 29 (61.7%) had experienced midwife syringe stab wounds and a number of 18 (38.3%) had never experienced midwife syringe stab wounds. Based on statistical test showed the value of  $p = 0.043$ , due to the significant value of  $p = 0.043 < 0.05$ , showed a significant relationship between the variables of the application of SOP injected with a needle puncture wounds on midwives in Mojokerto.

The conclusion of the activities Focus group discussion group on the implementation of SOP midwife injected the needle puncture wounds associated with village midwives in providing services inoculate action not all midwives to apply in accordance with SOP injecting or forgotten but they are sometimes based on experience and routine. The following excerpt Focus group discussion group midwife:

Ll: "... ..Likeour fixed precedure how to inject it. To remind that maybe there is something wrong"

Cr: "although no sometimes as routine and experience almost every day"

An: "... never read just forgot, yes ... because this is where we do not provide"

The conclusion of the activities Focus group discussion group coordinator on the implementation of SOP midwife injecting-related injuries needling action is to provide services inject although already know but sometimes does not apply in accordance with the SOP injected, it is due to forgotten or depending on individual officers, while applying in accordance with the SOP for safety

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reasons and to prevent infectious. The following excerpt midwife Focus group discussion group coordinator:

Ss: "in fact it actually already know about the stew, but sometimes its application, go back to the individual"

Sn: "let not forget it later if there is stew, had forgotten to read again later"

Kh: "yes midwife in addition to implementing the management was that yes fitted with the existing theory

Lk: Yes...Continue if we can stew adhered to, so wrote, compliance"

Sw: "is it all depends on officer Mrs.? If we carry out, yes it is for the safety of ourselves"

### G. Distribution Relationship With The Use Of PPE Gloves Stab Wounds Needles

Table 7 test results crosstabs between the uses of PPE gloves with syringe stab wounds  
on midwives in Mojokerto 2015

Use of PPE gloves	Needles Stab wounds				Totally		p	OR
	Yes		No					
	n	%	n	%	n	%		
Use	7	25,9	20	74,1	27	100	0,001	6,095
Not Use	32	68,1	15	31,9	47	100		
Totally	39	52,7	35	47,3	74	100		

Table 7 shows that the midwife who wear personal protective equipment gloves and never suffered stab wounds syringe 7 (25.9%) and number 20 (74.1%) had never experienced midwife syringe stab wounds. While the village midwife who do not wear personal protective equipment gloves consist of 32 (68.1%) had experienced midwife syringe stab wounds and a number of 15 (31.9%) had never experienced midwife needle puncture wounds injection. Based on statistical test shows the value of  $p = 0.001$ , because the significance value  $p = 0.001 < 0.05$ , showed a significant relationship between the variables wear personal protective equipment glove with a needle puncture wounds on midwives in the District Mojokerto.

conclusion of activities Focus group discussion group of midwives on the use of PPE gloves associated with needle puncture wounds that midwives in the use of PPE gloves in providing services injections they know what to wear PPE gloves but sometimes in part there were not wearing PPE gloves, it is because feel uncomfortable, feel uncomfortable and fear of offending patients. The following excerpt Focus group discussion group midwife:

Ks: "... that we wear PPE should the gloves but sometimes when we're in the right field forget it"

En: "only right we were, it would use uncomfortable, not good at his patient, put on a glove like illness so contagious. Not good also.

Am: "it's also not comfortable, if I myself, when asked to remove gloves take off

Again, install again, unless the patient is ..., if the one I do not comfortable Mrs."

St: "I think that, if not disposable gloves, the patient was served with a delicious, if we wear gloves, he felt how, we are also uncomfortable yes, handle the patient know the patient well, really ... Mrs.Watiso. Keeping the core feeling

Ar: "must implement the correct PPE, continue to implement the appropriate procedures Mrs., be careful because the consequences might be to our own. That's what needs to be awareness of our own"

The conclusion of the activities Focus group discussion group coordinator midwife about the use of PPE gloves associated with needle puncture wounds is the use of PPE gloves injecting action in providing services no consistent wear, while those not wearing PPE gloves because it was already commonplace. The following excerpt midwife Focus group discussion group coordinator:

Sw: ".... we perform every action always have to wear PPE and PI also must be maintained, it is necessary"

Lu: "yes, use personal protective, sometimes to inject only rarely were wearing"

Oak; ".... must PPE, gloves, at least not same likeit"

Lu: "LHA was that, had the usual"

### H. Distribution Relationship No recapping with Stab Wounds Needles



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Table 8 test results crosstabs between *nonrecapping* with stab wounds syringe on midwives  
in Mojokerto 2015

Non recapping	Needles Stab wounds				Totally		p
	Yes		No				
	n	%	n	%	n	%	
Yes	27	62,8	16	37,2	43	100	0,043
No	12	38,7	19	61,3	31	100	
Totally	39	52,7	35	47,3	74	100	

Table 8 shows that the midwife who did not apply *nonrecapping* syringe cover a total of 27 (62.8%) had experienced midwife syringe stab wounds and a number of 16 (37.2%) had never experienced midwife syringe stab wounds, while midwives who apply *nonrecapping* syringe cover is composed of 12 (38.7%) had experienced midwife syringe stab wounds and a number of 19 (61.3%) had never experienced midwife syringe stab wounds. Based on statistical test showed the value of  $p = 0.043$ ,  $p = 0.043$  significance value  $< 0.05$ , showed a significant relationship between the variables *nonrecapping* cover needle syringe with stab wounds in a village midwife in Mojokerto. The conclusion of the activities Focus group discussion group on the implementation *nonrecapping* midwife syringe cover associated with needle puncture wounds that midwives even though they know should apply *nonrecapping* or not recap needles after injection to provide services but by habit, forgetting and hurriedly rushed in handling patients and less carefully, so there is still midwife who do recapping or recap needles after injection of risky actions occur syringe stab wounds. The following excerpt Focus group discussion group midwife:

Am: "... because we do recapping action, so it should, ideally a needle that has been used to inject directly included in the safety box, without recapping or closure is done returned, but the habit yes ma'am, after taking action, spruce, eventually bring on the table, finally punctured "

Ar: "... Usually when a patient immunization too much, sometimes we do not want to shut accidentally when the syringe was punctured ..."

An; "...put in tremor, especially if hurry and haste, so, this hand entry. often at the recapping process "

En; "...every Day, if you run out injection same like that before, because already the

Norm, ....."

The conclusion of the activities Focus group discussion group coordinator on the implementation *nonrecapping* midwife syringe cover associated with needle puncture wound that is the midwife who did not apply *nonrecapping* or not recap needles after injection of providing services usually due to forgetfulness and lack of caution that a risk of puncture wounds syringe. The following excerpt midwife Focus group discussion group coordinator:

Ll: "...Forget, we put the needle cap that was so touched, we should be careful or direct dumping into the safety box"

Sn: "..... .. Time after injection inserts the needle, it is small, so sometimes not fitting so, it is small so it is not revealed"

Nr: "mid night inserting a needle cap, had it ouch punctured. Though we've been ... carefully

### I. Distribution Relationship Utilization Safety Box Or Sharp Container With Needles Stab Wounds

Table 9 test results crosstabs between the use of the safety box or container with sharp needles puncture wounds on midwives in  
Mojokerto 2015

Utilization Safety Box	Needles Stab wounds				Total		p
	Yes		No				
	n	%	n	%	n	%	
Yes	10	33,3	20	66,7	30	100	0,007
No	29	65,9	15	34,1	44	100	
Totally	39	52,7	35	47,3	74	100	

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Table 9 shows that the midwife who utilize safety box or *sharp container* consisted of 10 (33.3%) had experienced midwife syringe stab wounds and a number of 20 (66.7%) had never experienced midwife syringe stab wounds, while midwives who do not use safety box or sharp container consisted of 29 (65.9%) had experienced midwife syringe stab wounds and a number of 15 (34.1%) had never experienced midwife syringe stab wounds. Based on statistical test showed the value of  $p = 0.007$ ,  $p = 0.007$  significance value  $<0.05$ , showed a significant association between the use of variable safety box or container with a sharp needle puncture wounds on midwives in Mojokerto. The conclusion of the activities Focus group discussion group on the use of safety midwife or sharp container box associated with needle stab wounds that midwives in providing services mostly do not utilize their injection safety box or container sharp because of the difficulties brought sharp safety box or container or forget to take advantage of Sometimes ordinary trash or plastic bags (crackle). The following excerpt Focus group discussion group midwife:

Ar: ".... Sometimes it forgot to bring safety box, continue to use the place used needles was sober, usually it made it you know Mrs., take it crackle"

Am: "needle that has been used to inject directly included in the safety box, without recapping or closure is done returned, but the habit yes ma'am, after taking action, spruce, eventually bring on the table, finally punctured"

Ar: "so if there is not forced to wear its crackle. Use safety box roughing"

En: "it's safety box when we're full, brought here thrown into a burning back, grab another new one to take home ...."

The conclusion of the activities Focus group discussion group coordinator midwife about the use of the safety box or container that is associated with a sharp needle puncture wound that is the midwife after the injection action partially utilizing sharp safety box or container, whereas that does not utilize because forget though to bring safety box or sharp container. The following excerpt midwife Focus group discussion group coordinator:

Lu: "....if disposal processes, such as Mrs. ... Lili earlier. Forgot finally, when take Safety box, but not discarded"

Lk: "safety box is actually already available, we forgot to insert the needle cap was so touched, we should be careful or direct throw safety to the box, forgotten. That personal experience"

Sn: 'j, its safety box, used"

Ek: "needle that has been used to inject directly included in the safety box, without recapping or closure is done back"

### J. Monitoring Distribution Relationship With Needles Stab Wounds

Table 10. Results of test crosstabs between supervision with stab wounds syringe on midwives in Mojokerto 2015

Supervision	Needles Stab wounds				Totally		p
	Yes		No				
	n	%	n	%	n	%	
Yes	11	37,9	18	62,1	29	100	0,04 3
No	28	62,2	17	37,8	45	100	
Totally	39	52,7	35	47,3	74	100	

Table 10 shows that the existing village midwife supervision of the head of the clinic or midwife coordinator is composed of 11 (37.9%) had experienced midwife syringe stab wounds and a number of 18 (62.1%) had never experienced midwife stab wounds syringe, while midwives are no supervision of the head of the clinic or midwife coordinator consisted of 28 (62.2%) had experienced midwife syringe stab wounds and a number of 17 (37.8%) had never experienced midwife syringe stab wounds. Based on statistical test showed the value of  $p = 0.043$ , due to the significant value of  $p = 0.043 < 0.05$ , showed a significant relationship between the variables of supervision by needle puncture wounds on midwives in Mojokerto.

Oversight mechanisms conducted by Public Health Centre against midwives have been carried out by the head of the clinic or health center coordinator midwife who performed periodically or at the time. The conclusion of the activities Focus group discussion about supervision group midwife associated with needle puncture wound that is. Midwives in providing services a large part requires supervision and monitoring in the form of better supervision is carried out periodically scheduled or at any time as a monitoring and evaluation in service in the village. The following excerpt Focus group discussion group midwife:

Am: "most do not; do supervision to ponkesdes or polindes"

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Ar: "I am reminded why Mrs., let keep exercise, let me remember ... remembering

Most do not, no evaluation"

Cr: "at least 1 year, one of the most oversees the health centers more than 10  
Villages"

St: "each of the other districts, there are midwife coordinator was happy to visit there, there are lazy-lazy, there is one month, there is one year, depending its midwife coordinator"

Ll: "perhaps sharing, in what way, such as SOPs us how to inject it. To remind you that maybe there is something wrong"

The conclusion of the activities Focus group discussion about supervision group midwife associated with needle puncture wound that is. Midwife requires regular supervision and monitoring aimed at coaching by providing feedback through regular meetings between the midwife coordinator with the midwife. The following excerpt Focus group discussion group midwife:

Sm: "for me, that supervision by way of warming science ... so we can pass on what we know, actually need, only time it was not there. If we control it ... not like school children, we see"

Nr: "we're keeping one's privacy, so at this ... not good"

Lk: "at the time he was also refreshing, the training time also, so ... so it all already know, the same bikor midwives, usually Friday's special gathering"

### IV. CONCLUSIONS

Recommendations from the Focus Group Discussion:

Based on the results of digging for information and discussion Focus group discussion conducted by a group of midwives and midwife coordinator of events needle puncture wounds on midwives in Mojokerto produce some recommendations which include:

Develop Management syringe stab wound in the form of standard operating procedures for the clinic.

Establishment of Infection Prevention and Control Team in health centers in the form of a decree Public Health Centre heads.

Commitment to the implementation of service standards.

The involvement of midwives in the planning needs of means of support services.

The existence of an effort to monitor and evaluate the performance or implementation of service standards.

### REFERENCES

- [1] Adisasmito, Wiku. 2008. Audit Lingkungan Rumah Sakit, Jakarta, Raja Grafindo Persada.
- [2] Adisasmito, Wiku. 2009. Sistem Manajemen Lingkungan Rumah Sakit, Jakarta, Raja grafindo Persada.
- [3] Ahmad. Ali., Ali. Tahmeena., Ghozi. Asifa M.Y., Ali. Zain. 2008. Needle Stick Injury And Associated Factors Among Medical Student, Pakistan Journal of Surgery, Vol.14. No.3.
- [4] Azwar, Azrur. 2006. Pengantar Administrasi Kesehatan, Bina Rupa Aksara, Jakarta.
- [5] Bari. Abdul. 2002. Buku Panduan Prktis Pelayanan Kesehatan Maternal Dan Neonatal, Yayasan Bina Pustaka Sarwono Prawirohardjo, Jakarta.
- [6] CCOHS. 2014. Needlestick And Sharps Injuries, [http://www.ccohs.ca/oshanwers/diseases/needlestick\\_injuries.html](http://www.ccohs.ca/oshanwers/diseases/needlestick_injuries.html).
- [7] Dewi, Sari Candra. 2001. Kepatuhan Terhadap Penerapan Standar Prosedur Operasional dengan Kejadian Kecelakaan Kerja Di Rumah Sakit, Tesis, Fakultas Kedokteran UI.
- [8] DEPKES RI. 2002. Pedoman Pondok Bersalin. Jakarta.
- [9] \_\_\_\_\_. 2005. Keputusan Menteri Kesehatan Republik Indonesia Nomor: 128/ MENKES/ SK/ VIII/ 2004 tentang Kebijakan Dasar Pusat Kesehatan Masyarakat. Jakarta.
- [10] \_\_\_\_\_. DEPKES RI. 2005. Instrumen Evaluasi Penetapan Standar Asuhan Keperawatan di Rumah Sakit, Jakarta.
- [11] \_\_\_\_\_. 2006. Panduan Nasional Keselamatan Pasien Rumah Sakit (Patient Safety). Jakarta.
- [12] \_\_\_\_\_. 2008. Pedoman Manajemen Kesehatan Dan Keselamatan Kerja (K3) Di Rumah Sakit. Jakarta.
- [13] \_\_\_\_\_. Direktorat Bina Kesehatan Kerja Departemen Kesehatan Kerja 2009. Pedoman Manajemen Resiko Kesehatan Lingkungan Bagi Dokter Kesehatan Kerja. Jakarta.
- [14] \_\_\_\_\_. 2009. Imunisasi Dasar Bagi Pelaksana Imunisasi/ Bidan. Jakarta.
- [15] \_\_\_\_\_. 2010. Keputusan Menteri Kesehatan Republik Indonesia Nomor: 1087/ MENKES/ SK/ VIII/ 2010 tentang Standar Kesehatan Dan Keselamatan Kerja Di Rumah Sakit. Jakarta.
- [16] \_\_\_\_\_. 2011. Peraturan Menteri Kesehatan Republik Indonesia Nomor: 1438/ MENKES/ PER/ IX/ 2010 tentang Standar Pelayanan Kedokteran. Jakarta.
- [17] Hanafi, M., A.M. Mohammed., M.S. Kassem., M. Shauki. 2011. Needlestick Injuries Among Health Care Workers Of University Of Alexandria hospital, Eastern Mediteranean Health Journal, Vol 17. No.1 p.29-30.
- [18] Idayanti. 2008. Hubungan pengetahuan dan sikap perawat terhadap penerapan SOP teknik menyuntik dalam upaya pencegahan infeksi di RSUD Arifin Achmad Pekanbaru, Tesis, USU.
- [19] Intan, Johan. 2013. Faktor-Faktor Yang Berhubungan Dengan Terjadinya Luka Tusuk Jarum Pada Paramedis Di Rumkital Midiyanto S Tanjung Pinang, Tesis, Depok FKM UI.

## International Journal for Research in Applied Science & Engineering Technology (IJRASET)

- [20] Katindo. 2011. Himpunan Peraturan Perundang-Undangan Keselamatan Dan Kesehatan Kerja, Jakarta.
- [21] Lemeshow, S, Hosmer Jr, David, Klar, Janelle. 1997. Besar Sampel Dalam Penelitian Kesehatan, Gadjah Mada University Press, Yogyakarta., Edisi Bahasa Indonesia, Terjemahan Oleh Diby Pramono.
- [22] Notoatmodjo, Soekidjo. 2007. Metodologi Penelitian Kesehatan, Rineka Cipta, Jakarta.
- [23] Notoatmodjo, Soekidjo. 2012. Pendidikan dan Perilaku Kesehatan, Rineka Cipta, Jakarta.
- [24] OSHA. 2014. Healthcare Wide Hazard Needle stick/ Sharps Injuries, <https://www.osha.gov/SLTC/etools/hospital/hazards/sharps.html>.
- [25] Perry dan Potter. 1999. Buku ajar Fundamental Keperawatan, Konsep, Proses dan Praktek, UI, EGC, Jakarta.
- [26] Purwandari, Atik. 2009. Ilmu Kesehatan Masyarakat Dalam Konteks Kebidanan, EGC, Jakarta.
- [27] Retno, Eny. 2009. KDPK Kebidanan Teori Dan Aplikasi, Nuha Medika, Jogjakarta.
- [28] Sabin, Wicker. 2007. Risk Of Needle stick Injuries From An Occupational Medicine And Virological View poin, International Commite Og Medical Journal, Vol.45, No.7, p 3-6.
- [29] Sofyan, Mustika. 2006. 50 Tahun IBI Bidan Menyongsong Masa Depan, PP IBI, Jakarta.
- [30] Suardi, Rudi. 2007. Sistem Manajemen Keselamatan Dan Kesehatan Kerja, PPM, Jakarta.
- [31] Sumiati, Asri. 2006. Analisis Faktor- Faktor yang Berhubungan Dengan Kinerja Kepala Ruang Di Rumah Sakit Dokter Kariyadi Semarang, Tesis, Undip.
- [32] R. Yarahmadi., R. Abbaszadeh Dizaji., A.F. Hosseini., A.A. Farsshad., Sh. Bakhan P. Moridi., Mehdi Aligol. 2013. The Prevalence of Needlestick Injuries Among Health Care Worker at A Hospital In Tehran, Iranian Journal of Health, Safety and Environment, 2003, Vol.1, No. 1, p.26-27.
- [33] Tarwaka. 2008. Keselamatan Dan Kesehatan Kerja “Manajemen Dan Implementasi K3 Di Tempat Kerja”, Surakarta: Harapan Press.
- [34] Zewdie, Aderaw. 2013. Assessment On Magnitude Of Needle Stick and Sharp Injuries And Associated Factors Among Health Care Workers In East Gojjam Zone Health Institution Amahara Regional State Etiopia, Global Journal Of Medical Research Desease, Vol 13.





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