PROCEEDING

3rd International Nursing Conference

Community Health Empowerment : Step Up Action Attaining Sustainable Development Goals

Faculty of Nursing University of Jember

Royal Hotel
Jember, East Java - Indonesia
November 4-5, 2017

Partnership

GREETING MESSAGE

Bismillahirrohmanirrohim
Assalamualaikum Wr Wb
Good morning and best wishes

The Honorable, Rector of University of Jember
The Honorable, Dean School of Nursing, University of Jember
The Honorable, All Speaker of the International Nursing Conference
The Honorable, Guests
The Honorable, Conference Committee
Dear All, All Participants of the conference

Thank God we praise the presence of Allah SWT, because of the blessing and grace, we all can be present in this place, in order to attend the International Nursing Conference. Solawat and greetings may still be delegated to the Great Prophet Muhammad SAW.

Ladies and Gentlemen,
As the beginning of this speech, I would like to say welcome to the third international nursing conference, with the theme "Community Health Empowerment: Step Up Action Attaining Sustainable Development Goals".

Good development for the community is sustainable development. Sustainable development is a development aimed at improving the quality of life of people around the world, both from present and future generations, without exploiting the use of natural resources that exceeds the capacity as well as capacity of the earth. This goal can be achieved through four elements of sustainable development objectives: (1) Economic growth and justice; (2) Social development; (3) Conservation of natural resources (environmental protection); (4) Good governance. These four elements are mutually supporting each other, creating relevant and sustainable development goals.

At the United Nations (UN) Conference held in Rio de Janeiro (Brazil) in June 2012, a sustainable development agenda called Sustainable Development Goals (SDGs) was discussed. SDGs are a set of objectives, targets, and indicators of sustainable development that are universal. SDGs are a continuation and expansion of the Millennium Development Goals (MDGs) that have been undertaken by countries since 2001 until the end of 2015.

At a summit meeting at the UN headquarters in September 2015, 193 UN member states agreed to make SDGs the framework of the political development and policy agenda over the next 15 years from 2016 to 2030. Governments in every UN member country, whether rich or poor, both developed and developing countries, have the responsibility to implement SDGs to achieve SDGs. SDGs consist of 17 goals and 169 targets, covering various Sustainable development issues. Of the 17 objectives of the SDGs, one of them is on Education and Health. How is the implementation of the SDGs in our country and the Asian countries?

To answer that question, then for the next 2 days starting from today on 4-5 November 2017 at Royal Hotel, we will discuss the implementation of SDGs with speakers from 5 countries namely:

1. Prof. Dr. Nursalam,M.Nurs., (HONS).Chairman of Indonesian National Nurses Association (East Java Region) (Indonesia).
2. Prof. Ching-Min Chen from National Cheng Kung University (Taiwan)
3. Prof. Violeta Lopez from National University of Singapore (Singapore)
4. Associate Prof. Dr. Wandee Sutarangsee from Prince of Songkla university (Thailand)
5. Br. Noel M. Tecson, SVD, RN, MSNfromUniversity of San Carlo (Philipines)
6. Ns. Tantut Susanto, Ph.D. from University of Jember (Indonesia)

Ladies and Gentlemen

This conference is attended by students, health department delegates, academics, hospital and community clinic practitioners with a total of 193 participants.

This event can be held because of the support and efforts of all parties. Therefore, I would like to thank the Rector of University of Jember, Head of School of Nursing- University of Jember, Indonesian National Nurses Association (INNA) or PPNI, Royal Hotel and all the committees who have worked hard to carry out this activity. I also thank to the sponsors who have worked with us so that this event run as expected. Amen.

We as the committee, apologize if there is anyinconvenience during this event. Our hope that this activity can increase our knowledge that benefits all of us. Amen.

Before I end my speech, I want to say "when we interpret that today is an ordinary day, then we will come out of this room as an ordinary people, but when we interpret that today is a very extraordinary day, then we will come out of this room as a very wonderful person ".

Finally, please enjoy this conference, may Allah SWT always gives blessings to all of us. Amen

Wassalamualaikum Wr. Wb.

Chairperson

Ns. Siswoyo, M. Kep.

TABLE OF CONTENTS

COMMITTEE

Advisor : Ns. Lantin Sulistyorini, M.Kes.
Ns. Wantiyah, M.Kep.
Murtaqib, M.Kep.
Ns. Rhondianto, M.Kep.

Chief : Ns. Siswoyo., M.Kep.

Vice Chief : Ns. Ahmad Rifai., M.S

Secretary : Ns. Emi Wuri Wuryaningsih, M.Kep., Sp.Kep.J
Achmad Satar, S.E., M.M.

Finance Committee : Ns. Dini Kurniawati, M.Kep., Sp.Kep.Mat.
R. Nur Rahmad, S.Sos.

Secretariat Committee : Ns. John Hafan S, M.Kep., Sp.Kep.MB
Latifa Aini Susumaningrum, M.Kep., Sp.Kom.
Ns. Kushariyadi, M.Kep.
Murni Hermawati, S, S.Th., M.Th.
Ika Noviana, A. Md.

Program Committee : Ns. Dodi Wijaya, M.Kep
Ns. Dicky Endrian Kurniawan, M.Kep.
Wara Bhakti Pratiwi, S. Si., M. Si.

Scientific Committee : Ns. Nur Widayati, M.N
Ns. Retno Purwandari, M.Kep.
Ns. M. Zulfatul A'la., M.Kep.
Ns. Kholid Rosyidi MN., MNS.
Ns. Peni Perdani., M.Kep.

Logistic and Accomodation Committee : Ns. Erti Ikhtiarini Dewi, M.Kep., Sp.Kep.J.
Hanny Rasni, M.Kep.
Ariestina Eka M., S. Sos.

Publication and Documentation Committee : Ns. Alfid Tri Afandi, M. Kep.
Ns. Enggal Hadi, M. Kep.
Edi Pitaya, S. P
Rosid

Facility and Equipment Committe : Ns. Mulia Hakam., M.Kep., Sp.MB.
Ns. Baskoro Setioputro. M. Kep.
Pengki Susanto
Fandi Ahmad, S. E.
Sofyan Fakih
Triyono Edi Sulamin

LIST OF ORAL PRESENTATION

LIST OF POSTER PRESENTATION

WORK POSITION AND LOW BACK PAIN IN ELDERLY FARMER

[1]Abdul Muhith, [2]Atikah Fatmawati,[3]Nurul Mawaddah, [4]M. H. Saputra
[1]Nursing Department of STIKes Majapahit; abdulmuhith1979@gmail.com
[2,3]Nursing Department of STIKes Majapahit
[4]Public Health Department of STIKes Majapahit

ABSTRACT

Background: Low Back Pain is one of the disturbances that occur in the body due to the activities of the human body during the move with an unsafe position. The agricultural sector is one type of work that has a high risk for its workers. Extreme environmental conditions and traditional equipment determine the level of health and safety of farmers. The aim of this study was to determine the relationship between a work position and low back pain in the elderly farmer, **Methods:** This research was quantitative research with an analytic observational method, used crosssectional design with Simple random sampling technique. The sample size was 45 farmers. This research was conducted in March 2017 in Sumengko village Mojokerto. **Results:** The result showed that most of the respondents are at the high-risk level (73,3%), meaning that the elderly farmers work in nonergonomic position. Low back pain experienced by most farmers is on the level of moderate complaints with 40 respondents (88.89%). Based on Spearman rank statistical test with a value of α = 0.05 significance level obtained result of 0.02, so there is a significant relationship between the working position of elderly farmers with the risk of low back pain in the Sumengko Mojokerto. **Conclusions:** Elderly farmers have low back pain complaints at moderate level, this is influenced by the unergonomic working position of farmers. So the farmers should keeping their body in good condition and also minimize the risk of getting low back pain.

Keywords: work position, elderly farmers, low back pain

INTRODUCTION

Indonesia as an agricultural country, where the majority of people in Indonesia are farmers. Based on data of physical activity condition in Indonesia stated that work with highest active physical activity is farmer/fisherman/labor followed by other work (Tarwaka, 2014). Some of the elderly still have the ability to work, but problems that may arise one of them is exposed to diseases associated with bone loss of density and stiffness in the joints (Muhith & Siyoto, 2016). Low Back Pain is a pain that is felt in the lower back region, which is both local and radicular pain or both. This pain is felt between the lower ribs to the bottom of the buttocks in the lumbar or lumbosacral areas and often accompanied by the journey of pain toward the legs and feet (NCHS, 2010). Low Back Pain generally does not result in disability, but the worker can lower the level of work productivity, decrease work performance, and quality of work, work concentration and also indirectly increase the risk of accidents. Ergonomic work positions are assessed to reduce the risk of work-related diseases in the form of musculoskeletal disorders (MSDs), especially low back pain, therefore the worker must work in an ergonomic way because a person performs his or her

Proceeding
3ʳᵈ International Nursing Conference
Community Health Empowerment: Step Up Action Attaining Sustainable Development Goals
Faculty of Nursing University of Jember
November 4-5, 2017 Royal Hotel Jember, East Java-Indonesia
ISBN: 976-602-5617-11-9

activities using uncontrolled muscle work can cause muscle disturbance (Suma'mur, 2014). Data in 2013, the working position of elderly farmers 56.8% showed elderly farmers working not in ergonomics position, this causes the risk of back pain in elderly farmers, there are 54.7% of elderly farmers are at risk of lower back pain (Pusdatin, 2015)

METHODS

This research is a quantitative research with an analytic observational method with cross-sectional approach. The population of this study was farmers aged 59 - 69 years in Sumengko village Mojokerto regency which amounted to 50 people. Samples in this study amounted to 45 people. In this study sampling used Probability Sampling where sampling technique using Simple Random Sampling. Data were analyzed using spearman rho test. The data used are primary data, obtained through questionnaires by workers who are willing to be respondents, where the questionnaire consists of a low back pain questionnaire and a work position questionnaire. The result of observation and assessment of the working position use image or photograph taken by the researcher. In the assessment of work position on respondent's posture using REBA method. REBA method is a very sensitive method in terms of evaluating the risk of posture, especially in the musculoskeletal system. Body segment division is also performed in this method. Body segments that will be individually coded and evaluate all parts of the body either upper limbs or body, neck, and legs.

The final result is to determine the risk of injury by setting the required level of action and intervening for immediate repair

Assessment of Low Back Pain (LBP) in this study using Nordic Body Map (NBM), with this tool can be known parts of muscles that have complaints with the level of complaints ranging from pain to pain. By analyzing the body map it can be seen the type and level of complaints Low Back Pain (LBP) perceived by farmers. This method uses a worksheet in the form of a body map which is a very simple, easy to understand, cheap and does not take a long time.

RESULTS

From the research results can be seen that there are 3 categories of REBA risk level corresponding to the respondents. Most respondents were 33 people (73.3%) who were at high-risk level. At the medium risk level as much as 10 respondents (22.2%) and at very high risk as much as 2 respondents (4.4%).The results also showed that the majority of respondents suffered Low Back Pain on the level of complaints are as many as 40 respondents (88.89%). Based on Spearman Rank test results, the significance value of 0.02 shows that correlation between work position and risk of low back pain is significant. The result of p-value is smaller than the significance level $\alpha = 0.05$ so it can be concluded that there is a relation between work position of the elderly farmer with a risk of low back pain (LBP) in Sumengko, Mojokerto.

Proceeding
3ʳᵈ International Nursing Conference
Community Health Empowerment: Step Up Action Attaining Sustainable Development Goals
Faculty of Nursing University of Jember
November 4-5, 2017 Royal Hotel Jember, East Java-Indonesia
ISBN: 976-602-5617-11-9

Table 1. Work Position and Low Back Pain in Elderly Farmer In Sumengko Jatirejo

Work Position	Low Back Pain (LBP)						Total	
	Low		Moderate		High			
	f	%	f	%	f	%	f	%
Moderate	2	20	8	80	0	0	10	100
High	0	0	31	94	2	6	33	100
Very High	0	0	1	50	1	50	2	100
Total	2	4,44	40	88.9	3	6.67	45	100
	N = 45		$\alpha = 0.05$		$p-value = 0.02$			

DISCUSSION
Work Position

The usual position of work done by elderly farmers is a position with the posture of the body standing on two feet, standing on one leg, , bent body, and squatting. But in this study most of the respondents are in a position with the posture of the body standing on two legs, the body bent and do the rotation of the body in approximately 4 times in a minute. This can cause a greater risk for the occurrence of low back pain.Efforts that can be made to overcome the problem of ergonomics work is to disseminate written information in the form of leaflets and visiting farmers' homes to provide information about ergonomic position and attitude of work to the elderly farmers. In addition, the role of health center also conducts surveillance on low back pain cases among farmers, especially the elderly.

Seen from work position data related with knowledge of Sumengko Village farmer is known that highest education level of the respondent is junior high level with high work position is 25 respondent (55,6%). The higher the educational level of a person, the easier it is to receive information so much of the knowledge it has, therefore the farmers in Sumengko village need socialization related to the ergonomic work position and the illness caused and the prevention or controlling

Low Back Pain

Farmers' work requires a static position that poses a greater risk of low back Pain. Viewed from the high prevalence of low back pain on farmers in Sumengko village, prevention can be done by stretching the muscles before doing the activity. From gender, it was found that the prevalence of Low Back Pain complaints with moderate risk was more prevalent in women as many as 23 respondents with a percentage of 51.1% compared with 17 men with 37.8%. In addition, the level of female muscle ability is physiologically lower when compared with men. Women only have 60% muscle strength of male muscle strength, especially for arm muscles, back, and legs. A smaller muscle mass leads to an increased prevalence of Low Back Pain complaints in women. In terms of age, Low Back Pain complaints by age found that the prevalence of Low Back Pain complaints with a moderate level of complaint was 22 respondents (48.9%) in the 65 to 69 age group. This is in line with a study conducted by KiranjitKaur (2015) which states that the highest Low Back Pain event is in the age group> 45 years with a percentage of 73.3%.

Proceeding
3ʳᵈ International Nursing Conference
Community Health Empowerment: Step Up Action Attaining Sustainable Development Goals
Faculty of Nursing University of Jember
November 4-5, 2017 Royal Hotel Jember, East Java-Indonesia
ISBN: 976-602-5617-11-9

This is due to an increase in the age of a person, not accompanied by an increase in physical capacity and functional ability. One consequence of the degenerative process is the occurrence of degeneration processes in the bones that increase the risk of low back pain. This often happens at the age of workers over 40 years (Andini, 2015). Based on the results of farmer's working period, the result shows that farmers working more than 10 years experienced Low Back Pain with a moderate level of complaints of 24 respondents (53.3%) compared with less than 10 Year as many as 16 respondents (35.6%). It proves that workers who have Low Back Pain complaints most felt by workers who have a working life> 10 years compared with those with working years <5 years or 5-10 years. The longer the working period the longer a person is exposed to musculoskeletal complaints risk factors. Farmers in Sumengko village on average have a long working period because of the majority of the livelihoods of Sumengko villagers as farmers.

The duration of the respondent's work on Low Back Pain complaints, it is known that the respondents work more than 5 hours and have Low Back Pain with a medium complaint rate of 29 respondents (64.4%). This is in line with research conducted by KiranjitKaur (2015) which states that farmers have working hours over 5 hours have more Low Back Pain complaints (70.6%) than farmers who have less than 5 hours a day (63, 6%). Farmers in Sumengko village tend to do work for more than 5 hours due to large fields so it takes a long time to process, and also in the elderly, they tend to do their job for a long time. For that, farmers are encouraged to take time off to relax. Relaxation after work is useful to avoid musculoskeletal complaints to farmers. Relaxation can be done by moving the waist left and right alternately or by straightening the waist after bending to avoid the fatigue or pain.

Working position of elderly farmer with risk of Low Back Pain

Based on the result of research indicate that work position in medium level with a low complaint is as much as 2 respondent (20%), moderate complaint counted 8 respondent (80%), and high complaint not experienced by respondent. For high-risk work positions, respondents experienced moderate complaints experienced by 31 respondents (94%). High complaints experienced by 2 respondents (6%). The position of work in very high level with a moderate complaint as much as 1 respondent (50%) and high complaint counted 1 respondent (50%). As for the position of work in a very high level with a complaint is not experienced by the respondent. Based on Spearman Rank test results, the significance value of 0.02 shows that correlation between work position and risk of low back pain is significant. The result of p-value is smaller than the significance level $\alpha = 0,05$ so it can be concluded that there is a relation between work position of the elderly farmer with a risk of low back pain (LBP) in Sumengko Village Mojokerto Regency.

Research conducted in Sumengko village that the farmers working position is in the high category with moderate complaints. Work that forces farmers to be in a non-ergonomic work posture leads farmers to experience fatigue faster and

27

Proceeding
3rd International Nursing Conference
Community Health Empowerment: Step Up Action Attaining Sustainable Development Goals
Faculty of Nursing University of Jember
November 4-5, 2017 Royal Hotel Jember, East Java-Indonesia
ISBN: 976-602-5617-11-9

indirectly provide additional workload. Implementation of ergonomic work positions will reduce workload and significantly reduce fatigue or health problems associated with posture and provide a sense of comfort to farmers. Work position is one of the factors affecting Low Back Pain, by other factors such as age, sex, length of service, and length of work.

CONCLUSION

From the results of identification, it can be seen that there are 3 categories of the risk level of complaints in using REBA body position assessment in accordance with respondents in Sumengko Village. The categories of complaint risk experienced by respondents are high, medium and very high. For the category of the highest risk of complaints experienced by respondents in the high category. From the results of the study note that there are 3 levels of complaints experienced by respondents is the level of complaints are, high and low. Respondents in Sumengko Village experiencing the highest level of complaints are on the level of moderate complaints. The results of statistical tests conducted showed that there is a significant relationship between the working position of elderly farmers with the risk of low back pain in Sumengko Village. Farmer expected to stretch the muscles before doing the work every day to avoid low back pain complaints although not feel the complaints low back pain. Public health workers need to play their role as an educator in Sumengko Village to explain that working requires a safe or ergonomic working position to reduce the risk of health problems. Health Workers need to make regular home visits to their main work area in risky working groups.

REFERENCES

Andini, F. 2015. *Risk Factory of Low Back Pain in Workers*. J Majority.Vol.4 No.1.Januari 2015

Kaur Kiranjit, 2015. *Prevalensi Keluhan Low Back Pain (LBP) pada Petani di Wilayah Kerja UPT Kesmas Payangan Gianyar April 2015*. ISM, VOL. 5 NO.1, 49 – 51

Muhith, A & Siyoto, S (2016).*Pendidikan Keperawatan Gerontik*. Yogyakarta: CV. Andi Offset

National Center for Health Statistic (NCHS).(2010). *Summary health statistic for U.S. Adults: National health interview Surey,* 2009.10 (249): 30-35.

Suma'murdan Doedirman, 2014.*kesehatan Kerja : Dalam Perspektif Hiperkes dan Keselamatan Kerja,* Jakarta : Airlangga.

Tarwaka. 2014. *Keselamatan dan KesehatanKerja: Manajemen dan Implementasi K3 di Tempat Kerja*. Surakarta :Harapan Press.

Tarwaka 2015.ErgonomiIndustri : *Dasar-Dasar Pengetahuan Ergonomi dan Aplikasi di Tempat kerja*. Edisi II dengan Revisi, Cetakan 2. Surakarta: Harapan Press

Pusat Data dan Informasi Kementerian Kesehatan RI. 2015. *Pembinaan kesehatan olahraga di Indonesia*. Jakarta: Departemen Kesehatan

Certificate of Appreciation

School of Nursing, The University of Jember
acknowledge with sincere appreciation that:

MUKHAMMAD H. SAPUTRA, M.EPID

has actively participated in
3rd International Nursing Conference:

"Community Health Empowerment : Step Up Action Attaining Sustainable Development Goals"

held in Jember, Indonesia on 04-05 November 2017 as :

PARTICIPANT

Accreditation of Indonesian National Nurses Association
Number: 0997/DPP.PPNI/SK/K.S/X/2017

Speaker	: 4 credit points
Moderator/Committee	: 3 credit points
Participant	: 3 credit points

Dean,
School of Nursing

Ns. Lantin Sulistyorini, M.Kes
NIP. 197803232005012002

Chairperson
3rd International Nursing Conference

Ns. Siswoyo, M.Kep
NIP. 198004220060041002