

# The Influence of Healthy and Productive Female Workers Movement (Gp2sp) on Work Health Behavior on Female Workers

Heriati<sup>1</sup>, Atjo Wahyu<sup>2</sup>, Masni<sup>3</sup>, Masytha Muis<sup>2</sup>, Furqaan Naiem<sup>2</sup>, Saifuddin Sirajuddin<sup>4</sup>

<sup>1</sup>Master Student Program, Departement of Occupational Health and Safety, Faculty of Public Health, Universitas Hasanuddin, <sup>2</sup>Lecturer, Departement of Occupational Health and Safety, Faculty of Public Health, Universitas Hasanuddin, <sup>3</sup>Lecturer, Departement of Biostatistics, Faculty of Public Health, Universitas Hasanuddin, <sup>4</sup>Professor, Departement of Nutrition, Faculty of Public Health, Universitas Hasanuddin

## Abstract

Recently, female workers have to work in almost all sectors. In carrying out their work, female workers faced various risks that have the potential to damage their health. Female workers also have a burden of doing domestic work and responsible for the quality of children as the next generation and experience the biological cycle, such as menstruation, pregnancy, childbirth, and breastfeeding. Based on that, the government has made an effort to improve the health of female workers known as Healthy and Productive Female Workers Movement (GP2SP). The aims of this study is the influence of the GP2SP through flipcharts on work health behavior on female workers. This research was an experimental study through Quasi Experiment with a time series research design and used flipcharts as a media. The sampling technique used was proportionate stratified random sampling. This study involved female workers who met the inclusion criteria. The results showed that there was an influence of the Healthy and Productive Female Workers Movement program through flipcharts to the work health behavior of female workers. It is expected that the company and the workers have a commitment and participate GP2SP activities, so they can improve their health status and productivity

**Keywords:** *work health behavior, knowledge, attitude, action, Healthy and Productive Female Workers Movement*

## Introduction

Recently, female workers have to work in almost all sectors. In carrying out their work, female workers faced various risks that have the potential to damage their health. Female workers also have a burden of doing domestic work and responsible for the quality of children as the next generation. Other than that, they experience menstruation, pregnancy, childbirth, and breastfeeding. These conditions require maintenance and protection of good health.

Based on research conducted in US, more than 58% of US women in the workforce have more cases related to Carpal Tunnel Syndrome, Tendonitis, respiratory diseases, infectious diseases, anxiety, and work stress associated with heart disease. According to the result of research in several industries in Tangerang, Jakarta, and Depok, it showed that anemia in female workers showed as 24-42%. Iron deficiency anemia also causes workers to become easily sick and have accidents, so the absenteeism increases, and the possibility of pregnancy can give a risk during childbirth and causes Low Birth Weight<sup>1</sup>. Another problem is the education level of female workers which is still low.

Based on that, the government has made an effort to improve the health of female workers known as Healthy and Productive Female Workers Movement. In 2017, 4

---

### Corresponding author:

**Heriati**

Bukit Hartaco Indah Blok 1 R No. 6, RT. 5, RW. 9, Sudiang Raya, Biringkanaya, South Sulawesi, Indonesia, 90241, heriati99@yahoo.com

of Minister in Indonesia the Minister of Health of the Republic of Indonesia, the Minister of Home Affairs of the Republic of Indonesia, the Minister of Manpower of the Republic of Indonesia, and the Minister of Women’s Empowerment and Child Protection of the Republic of Indonesia have a joint agreement about Healthy and Productive Female Workers Movement (GP2SP)<sup>2</sup>.

Based on the data compiled in the form of a coaching report by the South Sulawesi Provincial Health Office in 2019, PT. Bomar was dominated by female workers and was the target of GP2SP program in 2020. This governmental program included reproductive health service program for pregnant female workers, early detection of non-communicable diseases for female workers, increased breastfeeding during working time at work, the fulfillment of nutrition for pregnant and breastfeeding female workers, and control of the work environment. These programs also increased the work productivity.

In providing health education to behavioral change, methods and media are needed according to the abilities of health counselor and recipients. In this study, the researcher used a flipcharts. Flipcharts is one of the media that concise and has a comprehensive material component, so that it is easily understood by the

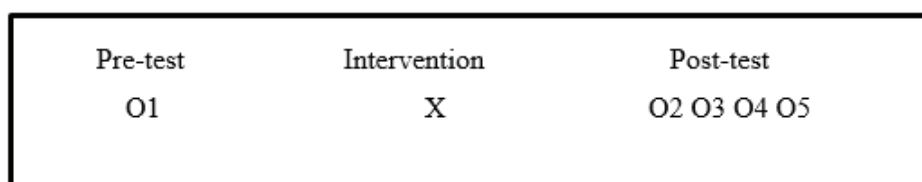
respondents. Based on this, the researchers took the topics related to the influence of the Healthy and Productive Female Workers Movement through flipcharts on work health behavior on female workers.

### **Material and Method**

This research was an experimental study through Quasi Experiment with a time series research design. The first step of this research was Pre-test. Next is providing interventions in the form of health promotion about GP2SP through a reciprocal sheet that was carried out in collaboration with the South Sulawesi Provincial Health Office. This intervention lasted for one day and had been previously discussed with the management to determine the time of research that was on Sunday, outside the working hours. The next step was Post-test to the respondent. After giving the first post-test, periodic measurements were carried out for every one week for 3 weeks and this periodic measurement was carried out on Friday after working hours.

This study involved female workers at PT. Bomar. The sampling technique used was proportionate stratified random sampling. Based on the calculation of the minimum sample and those who met the inclusion criteria including female workers were married, worked for  $\geq 2$  years, and willing to participate in this study, 42 respondents were chosen.

**This is the method scheme:**



**Keterangan :**

- O1 : Pre-test observation before intervention
- X : The Program of GP2SP
- O2 : Post-test observation after intervention (1<sup>st</sup> week)
- O3 : Post-test observation after intervention (2<sup>nd</sup> week)
- O4 : Post-test observation after intervention (3<sup>rd</sup> week)
- O5 : Post-test observation after intervention (4<sup>th</sup> week)

### Results

#### The Influence of Healthy and Productive Female Workers Movement on Health Behavior of Female Workers before and After Intervention that Repeatedly Assessed

1. Knowledge

**Table 1: The Influence of Healthy Productive Women Workers Movement on The Health Behavior Knowledge of Women Workers**

Variable	Decriptive	Mauchly's test of Sphericity		Test Of Within Subjects Effect		Multivariat Test
	Mean	Mauchly's W	P Value	Greenhouse Geisser (F)	P Value	Wilks Lambda (Partial Eta Square)
Knowledge O1 O2 O3 O4 O5	12.67	0.074	0.000	106.026	0.000	0.858
	14.12					
	14.33					
	15.98					
	16.40					

Table 2 shows that the general average score after the intervention (post-test= O<sub>2</sub>,O<sub>3</sub>,O<sub>4</sub>,O<sub>5</sub>) increased compared to before the intervention (pre-test). So, it could be considered that there was an influence of GP2SP on respondents' knowledge. The Wilks Lambda value indicated that the program had an effectiveness of 85.8% of workers' knowledge.

2. Attitude

**Table 2: The Influence of Healthy Productive Women Workers Movement on Health Behavior Attitude of Women Workers**

Variable	Descriptive	Mauchly's test of Sphericity		Test of Within Subjects Effect		Multivariat Test
	Mean	Mauchly's W	P Value	Greenhouse Geisser (F)	P Value	Wilks Lambda (Partial Eta Square)
Attitude O1 O2 O3 O4 O5	19.26	0.424	0.000	544.329	0.000	0.995
	26.02					
	30.64					
	34.31					
	35.66					

Table 3 shows that on the average, the attitude score increased after the intervention (post-test= O<sub>2</sub>,O<sub>3</sub>,O<sub>4</sub>,O<sub>5</sub>) compared to before the intervention (pre-test). So, it could be considered that there was an influence of

GP2SP on respondents' attitude. The Wilks Lambda value indicated that the program had an effectiveness of 99.5% of the workers' attitudes.

### 3. Action

**Table 3: The Influence of Healthy Productive Women Workers Movement on The Health Behavior Attitude of Women Workers**

Variable	Descriptive	Mauchly's test of Sphericity		Test Of Within Subjects Effect		Multivariate Test
	Mean	Mauchly's W	P Value	Greenhouse Geisser (F)	P Value	Wilks Lambda (Partial Eta Square)
Action						
O1	21.81	0.206	0.000	393.046	0.000	0.949
O2	26.64					
O3	30.76					
O4	34.26					
O5	37.55					

Table 3 shows that the score after the intervention (post-test= O<sub>2</sub>,O<sub>3</sub>,O<sub>4</sub>,O<sub>5</sub>) increased compared to before the intervention (pre-test). So, it could be considered that there was an influence of GP2SP on respondents' action. The Wilks Lambda value indicated that the program had an effectiveness of 94.4% of the workers' action.

### Discussion

The intervention provided were GP2SP program which consisted of reproductive health services and early detection of non-communicable diseases for women workers. Based on the results of measurement of the times series, there was changes before-after test. Thus, researchers assumed what is needed by the characteristics of the research object. Changes in subject scores from pre-test to post-test were vary greatly in quasi-experimental<sup>3</sup>

Risk management training intervention significantly affected the nurses' knowledge and attitudes<sup>4</sup>. In addition, a study showed that there was an increase in knowledge and skills in hospital staff after interventions of socialization and fire prevention simulations<sup>5</sup>. This research is also in accordance with a study conducted by Elnaour et al who stated that there is an increase in knowledge and practice in nurses and sanitation staff after being given an intervention<sup>6</sup>. Navidian et al also suggested that safety program interventions has a positive effect in increasing knowledge.<sup>7</sup>

Researchers assumed that the change in the value of knowledge scores after the intervention in this study was influenced by the media (flipcharts) because this media facilitated the work to explain and give information with pictures step by step. A set of flipcharts is a complete lesson or information. The advantages of flipcharts are clear images, interesting, and easy to understand.

This study is in line with Michael et al that by using media such as videos, flipcharts, and pamphlets, it can increase workers' knowledge and reduce work accident rates and occupational diseases after intervention<sup>8</sup>. The same thing is also in line with research conducted by Holtermann et al that the health promotion could increase the knowledge of employees who work at risky places<sup>9</sup>. Furthermore, research conducted by Eric and Naboth stated that the use of media can increase knowledge, where the knowledge score of female workers was higher than that male workers<sup>10</sup>. Mayasari et al also showed that health promotion carried out through the provision of booklets and audio-visuals increased knowledge about preventing transmission of disease.<sup>11</sup>

Knowledge gained from the provision of information was to make the worker know thus indirectly affect her future behavior. Providing information that was made through the promotion of women's reproductive health-related health consists of information before, during and after pregnancy and after childbirth. Whereas, health promotion was related to the detection of non-communicable diseases enabling workers to be aware of themselves so that they are able to protect themselves and do the prevention<sup>12</sup>

Besides that, this study are consistent with the results of research conducted by Suryanto et al that there were significant differences in the knowledge and attitudes of small and medium enterprises group after a given safety behavior intervention<sup>13</sup>. Nursana et al found that there were significant differences in the knowledge, attitudes and skills of medical emergency workers before and after the intervention<sup>14</sup>. This is also supported by Darmin's research which stated that there were significant differences in workers' knowledge and actions after being given an OSH socialization intervention through audiovisual media<sup>15</sup>. Mayasari et al also stated that there were differences in the attitudes of respondents before and after receiving health promotion.<sup>11</sup>

Delivering information through media provides a cognitive basis for the formation of attitudes. If the messages are suggestive enough, it will provide an affective basis in the formation of attitude in responding information which needs critical attitude. Therefore, this attitude needs to be developed in the promotion of health in the workplace so that problem solving strategies, especially the dilemma problems faced by women related to their reproductive health and the health problems they and their families experience, can spur the emergence of critical thinking habits.

Knowledge has an important role in shaping the attitudes and behavior of people who determine the quality of society<sup>16</sup>. The formation of attitudes as a basis for carrying out a behavior or life activity that is not only affected by knowledge and experience, but also other factors that can determine the formation of attitudes, among others, culture such as habits, traditions and support systems from the family and the environment<sup>13</sup>

The GP2SP can form a positive attitude in maintaining women's health so that it can improve the

health status of female workers which has a direct effect on increasing productivity. So it can be concluded that the increase in knowledge gained after participating GP2SP will be more meaningful not only by positive attitude accepting the results of it, but also supported by motivation to behave by applying the knowledge gained during the program.

This study is also in accordance with research conducted by Mazaheri and Heidernia that promotions before and after the intervention are different, where promotions can change the safe actions of steel industry workers<sup>17</sup>. Health promotion interventions also change and enhance the actions of workers in their work environment<sup>18</sup>. The changes in actions that occur on workers who are intervened are supported by the theory of S-O-R (Stimulus-Organism-Response), where the material objects of psychology and communication science are the same, such as humans whose souls include components: attitudes, opinions, behaviors, affection cognitions and conations. The basic assumption of this theory is: mass media has a direct, immediate, and direct effect on the communicant. This theory has the capacity as a stimulant (S) and produces a strong response (R)<sup>14</sup>. Also, this theory can be understood that the audiences have received information through the media. Substantially, the information received through the media given has a contribution in formulating messages to the audience.

The message is a source of strength in stimulating workers to carry out the desired action. As a result, the audience has indirectly carried out a learning process in capturing, understanding, and remembering the received message. This kind of condition unwittingly changes the audience's actions.

## Conclusion

Based on the results of the study, it could be concluded that there was an influence of the Healthy and Productive Female Workers Movement program to the knowledge, attitudes, and actions of female workers. On the other hand, the results of this study also showed that the program had an effectiveness of knowledge of 85.8%, attitudes of 99.5%, and actions of 94.9%. Even so, it is expected that the company has a commitment in carrying out the program activities, providing facilities and infrastructure for its implementation. For all female

workers, they can participate in the program activities in undertaking and empowering themselves, families, and community workers.

**Conflict of Interest:** None

**Source of Funding:** Self

**Ethical Clearance:** Health Research Ethics Committee, Faculty of Public Health, Universitas Hasanuddin

### References

1. Kementerian Kesehatan Republik Indonesia. Pedoman Pencegahan dan Penanggulangan Anemia pada Remaja putrid dan Wanita Usia Subur. Kementerian Kesehatan RI. Jakarta. 2016
2. Kementerian Kesehatan Republik Indonesia. Peraturan Menteri Kesehatan Republik Indonesia Nomor 52 Tentang Keselamatan dan Kesehatan Kerja di Fasilitas Pelayanan Kesehatan. Jakarta: Kementerian Kesehatan RI; 2018.
3. Widhiarso W. Aplikasi Anava Campuran Untuk Desain Eksperimen Pre-post Test Design. Yogyakarta: Fakultas Psikologi Universitas Gajah Mada; 2004.
4. Hairin, A. Analisis Current Situation Dan Pengaruh Pelatihan Manajemen Risiko Terhadap Pengetahuan Dan Sikap Perawat Di Rumah Sakit Umum Bahteramas Provinsi Sulawesi Tenggara. Universitas hasanuddin Makassar. 2018
5. Ambohamsah, I. Pengaruh Simulasi Pelatihan Terhadap Peningkatan Pengetahuan dan Keterampilan Tanggap Darurat Bencana Kebakaran di RSUD Polewali. Universitas Hasanuddin Makassar. 2017
6. Elnour AM, Moussa MM, El-Borgy MD, Fadelella NE, Mahmoud AH. Impacts of health education on knowledge and practice of hospital staff with regard to Healthcare waste management at White Nile State main hospitals, Sudan. *Int J Health Sci (Qassim)*. 2015 Jul;9(3):315-31.
7. Navidian A, Rostami Z, Rozbehani N. Effect of motivational group interviewing-based safety education on Workers' safety behaviors in glass manufacturing. *BMC Public Health*. 2015 Sep 19;15:929.
8. Burke MJ, Sarpy SA, Smith-Crowe K, Chan-Serafin S, Salvador RO, Islam G. Relative effectiveness of worker safety and health training methods. *Am J Public Health*. 2006 Feb;96(2):315-24. Epub 2005 Dec 27.
9. Holtermann A, Jørgensen MB, Gram B, Christensen JR, Faber A, Overgaard K, Ektor-Andersen J, Mortensen OS, Sjøgaard G, Søgaard K. Worksite interventions for preventing physical deterioration among employees in job-groups with high physical work demands: background, design and conceptual model of FINALE. *BMC Public Health*. 2010 Mar 9;10:120.
10. Eric TC, Naboth B. The Ability Of Video Training To Reduce Agricultural Knowledge Gaps Between Men And Women In Rural Uganda. 2013;2:13-16
11. Mayasari A, Rahaya, RR S R, Yuniastuti, A. The Distinction Influence of Booklet and Audiovisual Health Promotion Media on Knowledge and Attitude Of Prospective Bridegroom About Prevention of Hiv / Aids Invention in Religious Affairs Office of North Semarang. *Public Health Perspective Journal*. 2020 April;5(1):67-75
12. Ministry of Health of The Republic of Indonesia, Ministry of Home Affairs of The Republic of Indonesia, Ministry of Manpower and Transmigration of The Republic of Indonesia, Ministry of Women's Empowerment and PA of The Republic of Indonesia, Executive Board of The National Association of Indonesia, and Central Board Trade Union Confederation All Indonesia. Healthy Productive Women Workers Movement (GP2SP) [Internet]. Indonesia; 2012. Available from: [https://betterwork.org/wp-content/uploads/2017/10/Healthy-Productive-Women-Workers-Movement\\_GP2SP.pdf](https://betterwork.org/wp-content/uploads/2017/10/Healthy-Productive-Women-Workers-Movement_GP2SP.pdf)
13. Suryanto, Heryanto, Andodo C. Pengaruh Pelatihan Safety Behavior Terhadap Pengetahuan Dan Sikap Kelompok Usaha Kecil Menengah (Ukm) Di Sekitar Unsoed Purwokerto. *Jurnal Kesmasindo*. 2016 Jan;7(2):132-144
14. Nursana, IM, Ghaznawie M, Budu. Pengaruh Simulasi Kedaruratan Medik Terhadap Kompetensi Petugas Penanggulangan Bencana Daerah Provinsi Sulawesi Barat. *The Soedirman Journal of Nursing*. 2013 Nov;8(3)
15. Darmin Y. Pengaruh Promosi K3 Menggunakan Media Audio Visual Terhadap Tindakan Pekerja Departemen Workshop Maintenance PT Semen Bosowa Maros. Makassar: Fakultas Kesehatan Masyarakat Universitas Hasanuddin; 2016.

16. Azwar S. Sikap Manusia dan Pengukurannya Edisi 2. Yogyakarta: Pustaka Pelajar: 2008
17. Mazaheri MA, Heidarnia A. The effect of intervention based on Health Action Model to promote workers' safe behavior in Isfahan Steel Company. *J Educ Health Promot.* 2015 Aug 6;4:64.
18. Hanifarahman. Teori Komunikasi: Perilaku dan Komunikasi [Internet]. 2012 [updated 2012 June; cited 2019 Nov 16] Available from: <https://hanifrahm.wordpress.com/>
19. Lange FD, Jones K, Ritte R, Brown HE, Taylor HR. The impact of health promotion on trachoma knowledge, attitudes and practice (KAP) of staff in three work settings in remote Indigenous communities in the Northern Territory. *PLoS Negl Trop Dis.* 2017 May 24;11(5):e0005503.