



Conference Paper

Workplace Health Promotion Related to Occupational Safety Climate: A Case Study by the Government on Batik SMEs in Pekalongan Regency, Central Java, Indonesia

Fennia Herma Yunita^{1,2}, L. Meily Kurniawidjaja¹, and Indri Hapsari Susilowati¹

¹Occupational Health and Safety Department, Faculty of Public Health, Universitas Indonesia, Jl. Margonda Raya, Beji, Pondok Cina, Kota Depok, Jawa Barat 16424, Indonesia ²Ministry of Manpower of the Republic of Indonesia

Abstract

Currently, small to medium enterprises (SMEs) are of major government concern in improving occupational health and safety (OHS) due to their low implementation. However, a lack of attention has been paid to the problems of OHS in SMEs. Even if the current OHS laws cover SME workers, there is still a lack of implementation. Observance of regulation, monitoring, and protection of employees is needed to implement optimal workplace safety and health. One of the important factors that influence the observance of safety regulation is the safety climate. The safety climate plays an important role in the safety culture and is mirrored through the attitude expressed in the worker's OHS behavior. This survey describes the government's efforts to provide workplace health promotion and its relation to the occupational safety climate of Batik SMEs in the Pekalongan Regency. This research uses a descriptive design intended to develop the workplace safety climate of Batik workers after receiving health promotion in the workplace. The instrument used was the Nordic Safety Climate Questionnaire. The result showed that after health promotion was conducted, the average health indices were sufficient. Of all seven dimensions, only the fifth dimension, workers' safety priority and risk non-acceptance, had consistent low scores. This showed that workplace health promotion enhanced the profile of the safety climate. The study concluded that new breakthrough efforts to conduct workplace health promotion were still needed in order to improve OHS implementation in the Batik SMEs, and an innovative approach is needed to get the attention of SME workers.

Keywords: workplace health promotion, safety climate, Batik SMEs

Corresponding Author: L. Meily Kurniawidjaja meily@ui.ac.id

Received: 15 May 2018 Accepted: 3 June 2018 Published: 19 June 2018

Publishing services provided by Knowledge E

© Fennia Herma Yunita et al. This article is distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the ICOHS 2017 Conference Committee.

Generation Open Access

How to cite this article: Fennia Herma Yunita, L. Meily Kurniawidjaja, and Indri Hapsari Susilowati, (2018), "Workplace Health Promotion Related to Occupational Safety Climate: A Case Study by the Government on Batik SMEs in Pekalongan Regency, Central Java, Indonesia" in International Page 260 Conference of Occupational Health and Safety (ICOHS-2017), KnE Life Sciences, pages 260–267. DOI 10.18502/kls.v4i5.2558



1. Introduction

The government is trying to improve the implementation of the quality of occupational health and safety (OHS) in various sectors, especially in small to medium enterprises (SMEs). Some issues of SMEs in Indonesia are related to OHS, such as low compliance with OHS regulations, low knowledge of SME workers, and impaired health conditions. A study by Kaewboonchoo et al. found that SMEs in ASEAN countries, including Indonesian, face a number of difficulties in complying with OHS regulations due to fewer resources and less awareness [1]. The working environment and ergonomic conditions in SMEs may not be well controlled and maintained and have the high possibility of affecting the workers' health. Impaired health conditions can lead to decreased work ability. However, so far, little attention has been paid to the problems of OHS in SMEs. Even if current OHS laws cover SME workers, there still is a lack of implementation [1].

Susilowati et al. found that the education level among SME workers was low, as most of them only graduated from junior high school, which led the researches to determine that the government should conduct a worker-based workplace health promotion approach to facilitate their understanding in OHS socialization and improve OHS implementation [2]. With a good workplace safety and health level, sickness absences will decrease, workers will be more productive, profit will increase, and finally, the welfare of the employees and employer will increase [3]. An observance of regulation, monitoring, and protection of employees is needed to implement optimal workplace safety and health. One important factor that influences the observance of safety regulation is the safety climate [4].

The safety climate is the perception pf policy, procedure, and practices related to employee safety that influence the intention of the employee's observance of the policy. The safety climate shows the perception of the employee toward the safety value of the organization where they work [5]. The safety climate is a part of the organization climate that shows a safe condition in an organization and can be used to measure safety performance [6]. The safety climate is a multidimensional factor and can be considered an important part of workplace safety [7]. A study by Neal and Griffin concluded that the organizational climate could influence perception of the safety climate, and this safety climate can influence the safety performance through the effect on knowledge and motivation [8]. There are only three factors that determine the difference in an individual's performance: knowledge, skill, and motivation. If one does not have enough motivation to observe the safety regulation or to be involved in safety activities, that person will choose not to perform those actions.



If someone does not have the sufficient knowledge and skill to observe the safety regulation and to be involved in safety activities, that person will not be able to act or intend to observe the safety procedures [8]. The safety climate plays an important role in the safety culture and is mirrored through the attitude expressed in the worker's OHS behavior. This can be seen in their actions oriented toward the main tasks and supporting the activities that improve OHS [9]. Therefore, it is expected that, after the socialization of a workplace health promotion program in the form of counseling and the addition of provisions on personal protective equipment (PPE), the perception of OHS in the safety climate of Batik SMEs can be captured.

2. Method

This research uses a descriptive design intended to develop the workplace safety climate of Batik workers after providing health promotion in the workplace. The instrument used was the Nordic Safety Climate Questionnaire (NOSACQ-50), which was translated into Bahasa Indonesian. The NOSACQ-50 was valid and reliable in accordance with the results of the research conducted by Sukma Nandini [10]. The questionnaire contained 50 questions for figuring out the level of a work climate. The NOSACQ-50 consisted of seven sections of questions, each of which represented the following elements of a work climate:

- 1. Dimension 1-management safety priority and ability (9 items);
- 2. Dimension 2-management safety empowerment (7 items);
- 3. Dimension 3-management safety justice (6 items);
- 4. Dimension 4- workers' safety commitment (6 items);
- 5. Dimension 5-workers' safety priority and risk nonacceptance (7 items);
- Dimension 6—peer safety communication learning and trust in safety ability (8 items); and
- 7. Dimension 7—workers' trust in the efficacy of the safety systems (7 items).

The procedure is based on the government's budget, and it was decided that 200 workers of micro, small, and medium enterprises in the Batik sector in the Pekalongan Regency would receive PPE assistance and OHS socialization. Thus, 1,000 workers of micro, small and medium enterprises in Pekalongan were registered and then 200 workers survey respondents were taken based on workers who were eligible to be the



beneficiaries of PPE and OHS socialization. A survey on the occupational safety climate was conducted after the socialization and Focus Group Discussion in December 2016. The participants received the NOSACQ-50 and answered 50 questions. Eighty-eight samples from 200 people consisting of workers and management of micro, small, and medium enterprises in the Batik sector in the Pekalongan Regency who were valid in answering the questions in the questionnaire were obtained.

The answers for the NOSACQ-50 were collected and analyzed. Each question item in the questionnaire was answered with a Likert scale of 1–4. The data were then calculated by counting the mean of each dimension. The data used in the calculation were the answers of the questions of each dimension. Then, the means of all dimensions were used to calculate the mean of the answers of all samples. According to the National Research Center for the Working Environment, the scores obtained from the NOSACQ-50 can be interpreted from each dimension shown in Table 1 [11].

Mean Score	Interpretation
> 3.30	Good level, allowing for maintaining and continuing developments
Between 3.00 and 3.30	Fairly good level, with slight need for improvement
Between 2.70 and 2.99	Fairly low level, with need for improvement
< 2.70	Low level, with great need for improvement

TABLE 1: Interpreting the results of each dimension.

3. Results

The Ministry of Manpower of the Republic of Indonesia and the Directorate General of Labor Inspection Development and Occupational Health and Safety conducted workplace health promotion in the sector of Batik SMEs through socialization, counseling, focus group discussion, and provision of PPE.

After socialization, it was found in the safety climate that female workers' highest score was in the dimension of management safety justice (3.3) and lowest score was in the dimension of workers' safety priority and risk nonacceptance (2.96),

Meanwhile, the male workers' highest score was in the dimension of management safety justice (3.38) and lowest score was in the dimension of workers' safety priority and risk nonacceptance (2.99) (Figure 1). For workers age 20–29, the highest score was in the dimension of management safety justice and the dimension of peer safety communication, learning, and trust in safety ability (3.31), and the lowest score was

Day 1 Socialization and FGD	Occupational Health and Safety (OHS) in micro, small, and medium enterprises in the Batik sector The functions and importance of PPE OHS culture in the informal sectors, especially Batik
Day 2 Providing PPE	Two hundred workers of micro, small, and medium enterprises in the Batik sector in Pekalongan received assistance of PPE, including protective gloves, aprons, masks, and shoes.
Day 3 Monitoring	Manpower and Transmigration Office, Pekalongan Regency, monitored the use of PPE by Batik SME workers.

TABLE 2: Workplace health promotion conducted 3 days at Balai Pertemuan Pekalongan.

in the dimension of workers' safety priority and risk nonacceptance (2.92), whereas for workers age 30–39, the highest score was in the dimension of management safety justice (3.39), and the lowest score was in the dimension of workers' safety priority and risk nonacceptance (3.00). Older workers 40–55 years had their highest scores in the dimension of peer safety communication, learning, and trust in safety ability (3.55) and their lowest score in dimension of workers' safety priority and risk non-acceptance (2.99) (Figure 2).



Figure 1: Safety climate based on gender.



Figure 2: Safety climate based on age.

4. Discussion

Health promotion in the workplace is a series of educational and organizational activities involving work organizations, community in the workplace, and especially designated families (ways) to improve and support conducive health behavior both in the lifestyle and workstyle of workers and their family (object) in order to achieve optimum workers' health status and work capacity (aims). According to Green, behavior is determined by three main factors: 1) predisposing factors that are behavioral antecedents, such as knowledge, attitudes, beliefs, perceptions, norms, and values adopted; 2) enabling factors, which are factors that facilitate and influence behavior directly or through environmental factors; and 3) reinforcing factors, which are factors that make the individual maintain or repeat the behavior, for example, by monitoring. Behavior changes occur because of the process of interaction between individuals and the environment through the learning process. The learning process is successful if the individual adds knowledge, changes perceptions and behaviors, and reacts and responds in a way different from the previous behavior. Changes in behavior resulting from the learning process can be temporary, relatively permanent, and permanent; minimal permanent change is required in the prevention of disease and occupational accidents so that unsafe behavior will not be repeated [12].

The results of this study indicate that, after the socialization is obtained from the seven dimensions of the safety climate, differences in the scores of the occupational



safety climate were not significant in the age category. The scores ranged between 3.0 and 3.5. This result was different from the gender category, where the scores of the occupational safety climate in males were always higher in all categories than for females, except for dimensions 2 and 6. This means that males have a good perception of policies, procedures, and implementation related to security in the work-place. According to Krech, perceptions are influenced by frame of reference, which is a knowledge framework that is owned and obtained from education, reading, research, or other means, and field of experience, which is experience that has experienced itself and is inseparable from the environment [13].

5. Conclusion

This study showed that workplace health promotion enhanced the profile of the safety climate. Only one of seven dimensions in the safety climate had a low score. The study concluded that a new breakthrough effort to conduct workplace health promotion is still needed in order to improve OHS implementation on Batik SMEs, and an innovative approach is needed to get the attention of SME workers. Workplace health promotion is required based on a conceptual framework that is built through several key activities, such as approaches, strategies, priority areas, influence factors, and others. Not only must the socialization and provision of PPE be prioritized as a way to improve the implementation of OHS, but there also must be more value given so that 'Safety is my life' not only becomes the government slogan but is also applied to the OHS worker culture.

Acknowledgments

The authors would like to thank the Transmigration and Manpower Office of the Central Java Province, entrepreneurs of Batik SMEs of the Pekalongan Regency, as well as the Ministry of Transmigration and Manpower of the Republic of Indonesia for their sincere help in completing this research. We also thank the Faculty of the Public Health Magister Occupational Health and Safety, Universitas Indonesia.

References

[1] Kaewboonchoo, O., Isahak, M., Susilowati, I., et al. (2016). Work ability and its related factors among workers in small and medium enterprises: Comparison

among four asean countries. *Asia Pacific Journal of Public Health*, vol. 28, no. 5, pp. 438–449.

- [2] Susilowati, I. H., Fitria, L., Low, W. Y., et al. (2017). predictive factors for quality of life among small and medium enterprise workers in Indonesia. *Asian Journal of Applied Sciences*, vol. 10, no. 3, pp. 116–125.
- [3] Markkanen, P. K. (2004). Occupational Health and Safety In Indonesia (Working Paper 9). Manila: ILO Subregional Office For South-East Asia and the Pacific.
- [4] Prihatiningsih, S. (2010). Pengaruh Iklim Keselamatan Dan Pengalaman Personal Terhadap Kepatuhan Pada Peraturan Keselamatan Pekerja Konstruksi. Jurnal Psikologi, vol. 37, no. 1, pp. 82–93. Fakultas Psikologi Universitas Gadjah Mada.
- [5] Neal, A. and Griffin, M. A. (2004). Safety climate and safety at work, in Barling and R. F. Michael (eds.) *The Psychology Of Workplace Safety*. Washington: American Psychological Association.
- [6] Mulyasaripasca, W. Pengembangan Model Iklim Keselamatan Terhadap Kecelakaan Kerja Dan Penyakit Akibat Kerja (PAK). Institut Teknologi Sepuluh Nopember.
- [7] Hamalainen, P., Leena Saarela, K., and Takala, J. (2009). Global trend according to estimated number of occupational accident and fatal work-related diseases at region and country level. *Journal Of Safety Research*, vol. 40, no. 2, pp. 125–139.
- [8] Neal, A. and Griffin, M. A. (2002). Safety climate and safety behaviour. *Australian Journal of Management*, vol. 27 (special issues), pp. 67–73.
- [9] Sholihah, Qomariyatus dan wahyudi kuncoro. (2014). *Keselamatan kesehatan kerja, konsep, perkembangan, & implementasi budaya keselamatan*. Jakarta: EGC.
- [10] Sukma nandini. (2012). Perancangan Alat Ukur Iklim Keselamatan Kerja. Industrial Engineering and Management ITB. Bandung.
- [11] NOSACQ-50 (Nordic Occupational Safety Climate Questionnaire). (2012). The National Research Centre for the Working Environment. Denmark. Retrieved from www.nrcwe.dk/NOSACQ
- [12] Kurniawidjaja, L. M. (2011).*Teori dan Aplikasi Kesehatan Kerja*. Jakarta: Universitas Indonesia.
- [13] Krech, D. (1962). Individual in Society. Tokyo: McGraw-Hill, Kogakhusha, Ltd.