The Attitude of Construction Workers toward the Implementation of Occupational Health and Safety (OHS)

L Widaningsih*, I Susanti, and T Chandra
The Department of Architecture Engineering Education, The Faculty of Technical and Vocational Education, Universitas Pendidikan Indonesia, Bandung, Indonesia

Abstract. Construction industry refers to one of the industries dealing with high accident rate. Besides its outdoor workplace involving many workers who usually work manually, the workers’ work culture and less awareness of occupational health and safety (OHS) are attributed to the high accident rate. This study explores some construction workers who are involved in some construction projects in big cities such as Bandung and Jakarta. The questionnaire given to the construction workers focusing on stone construction, wood construction, and finishing session reveals that the construction workers knowledge and understanding of nine Occupational Health and Safety (OHS) aspects reach above 50%. However, does not appear to reflect their knowledge and understanding of Occupational Health and Safety (OHS). The results of Focus Group Discussion (FGD) and an in-depth interview show that the fallacious implementation of Occupational Health and Safety (OHS) is attributed to their traditional “work culture”.

1. Introduction
The implementation of Occupational Health and Safety (OHS) in an industry is the main requirement that can influence the investment value, the product quality, the construction industry’s survival, and competitiveness in a country. Globally, in a global industrial competition, industrial workers are required to pay attention to the Occupational Health and Safety (OHS). This is an attempt to maintain quality, productivity, and occupational health [1].

In fact, the implementation of Occupational Health and Safety (OHS) in Indonesia still obtains less attention. The high occupational accident rate reflects this condition. Many occupational accidents occur in construction service. Besides its outdoor workplace involving many workers who usually work manually, the workers’ work culture and less awareness of occupational health and safety (OHS) are attributed to the high accident rate.

This study explores some occupational workers, the members of Paguyuban Kuli Bangunan (PAKUBA) community in Sudalarang village, Sukawening, Garut as the participant. They are often involved in some construction projects in big cities such as Bandung and Jakarta [2]. They are categorized by the field that they are focusing on. They are divided into a group focusing on stone construction, wood construction, and finishing session. The participant reveals that their knowledge and understanding of nine Occupational Health and Safety (OHS) aspects in terms of construction occupation mostly reaches above 50%. However, the implementation of Occupational Health and Safety (OHS) in practice does not appear to reflect their knowledge and understanding of
Occupational Health and Safety (OHS) [3]. The results of Focus Group Discussion (FGD) and an in-depth interview show that the fallacious implementation of Occupational Health and Safety (OHS) is attributed to their traditional “work culture”.

2. Method

2.1. Participant
A survey, in terms of the field of work and educational background, involves 79 active PAKUBA members. An interview is used to measure the knowledge level of 29 participants. Also, another in-depth interview involves 3 participants who’ve over 30-years work experiences.

2.2. Data collection
The data are collected through a questionnaire and in-depth interview [4]. The questionnaire is used to measure the construction workers’ knowledge about the condition of Occupational Health and Safety (OHS) [4]. Meanwhile, the in-depth interview is used to explore the construction workers’ understanding of and attitude to the implementation of Occupational Health and Safety (OHS) in practice [5].

2.3. Data analysis
In Indonesia, most of the construction workers do not have the vocational educational background that is suitable for their skill and interest. The reason for them to be the construction workers is due to the lack of job vacancy related to their skill. Statistics show that the construction workers –i.e. the members of PAKUBA community – are senior high school graduates (47%) (see Figure 1). This statistic is higher than the percentage of national workers, who mostly are elementary school graduates and even do not have the formal educational background (45.66%) [6].

| The Participant’s Educational Background |
|-----------------------------------------|
| Elementary school: 24%                  |
| Junior high school: 29%                 |
| Senior high School: 47%                 |

Figure 1. The Participant’s Educational Background
Source: Research Document, 2016

There are 79 construction workers who are reported as the active members of PAKUBA. They are categorized by the field of work that they are focusing on, including bricklayer, carpenter, painter, blacksmith, electrician, executor, and labor. Most of them deal with construction work, focusing on building (see Figure 2).
The conditions of the construction workers’ Occupational Health and Safety (OHS) include Construction Safety Equipment (CSE) and Construction Personal Protective Equipment (PPE). There are nine aspects of knowledge that are measured (see Figure 3). They are 1) the use of safety boot, 2) the use of safety helmet, 3) the use of safety glasses, 4) the use of dust mask, 5) the use of long sleeve T-shirt, 6) the use of safety gloves, 7) the use of safety belt, 8) rechecking of Construction Safety Equipment (CSE) and Construction Personal Protective Equipment (PPE), 9) the understanding of the Occupational Health and Safety (OHS) regulation.

3. Analysis and Discussion

Construction industry refers to the heavy industry that needs many workers who can deal with their job manually where the job can put them into dangerous conditions [7]. Lacks of education and training of the Occupational Health and Safety (OHS) result in construction workers’ less awareness of their occupational health and safety (OHS) [8]. Moreover, the construction industry, hiring the workers, has the responsibility to take care of the Occupational Health and Safety (OHS). The reason for the construction industry to take care of the Occupational Health and Safety (OHS) is because OHS deals with many problems related to the aspects of human right, law, and cost which become the responsibility of the industry itself [9].
The data analysis of the construction workers as informants depicts that their knowledge regarding Occupational Health and Safety (OHS) in nine aspects analyzed in this study is actually sufficient. It means that the workers know about the Occupational Health and Safety (OHS) regulation which have to be implemented during their work hours. Problems that arise is the knowledge is not implemented when they work due to various reasons. Most of the Indonesian construction workers’ attitude and behavior still disregard the implementation of Occupational Health and Safety (OHS), they do not care about their own safety and health. For example, smoking. Most of the construction workers are heavy smokers and smoking has become a habit even when they are working. In the aspect of works safety, the use Construction Safety Equipment (CSE) and Construction Personal Protective Equipment (PPE) still becomes a burden which, in their perspective, will interrupt their work. The result of the analysis is supported an informant's statement:

“Personally, every Occupational Health and Safety (OHS) requirement and rule is very important and has to be implemented because it will protect the workers from accidents. It is just that when working in the field, it is still hard to implement it because we are not used to it and do not feel comfortable if we have to wear the required uniform” (Kholidin).

The proportion of work accidents in Indonesia in the construction sector becomes the biggest contributor along with manufacture industries which are 32%. Several types of work accidents experienced by the construction workers include falling from a high place (26%), concussion (12%), and crushed (9%) [10]. Based on the information gathered from informants, work accidents in construction projects are often experienced by their team whether it is a minor or major accident.

“When undergoing a skyscraper project in Mangga 2, there was one an accident that a worker (subordinate) fell from the 28th floor, he does not use the safety belt, but thank God he is saved because the safety net was installed” (Rahmat Sihabudin).

Another informant expresses that work accidents happen several times in construction projects and it has taken its toll because one of their team members from Desa Citangtu was dead. Among the workers, work accidents are only considered as a risk and even fate that they have to accept. The awareness that the Occupational Health and Safety (OHS) implementation is an important part which is not supposed to be separated from their work activities has not been well planted. As a matter of fact, currently, one of the characteristics and work demands is Occupational Health and Safety (OHS) related issues which can change the culture of work safety as well as the power of regulation which controls it both at national and local levels as an important agenda for every country [11].

4. Conclusion

From the aforementioned explanation, it can be concluded that:
1. Occupational Health and Safety (OHS) for construction workers in Indonesia still becomes a fundamental problem found in some workspace both in simple building work and construction projects with a high level of complexity.
2. The construction workers’ level of knowledge of Occupational Health and Safety (OHS) is quantitively enough with an above average percentage of 50%, but on the implementation in the field, the knowledge is not well implemented when they are working.
3. The lack of the Occupational Health and Safety (OHS) training, as well as work culture, developed among the workers, is the cause of the lack of awareness to apply Occupational Health and Safety (OHS) while working.
4. Attitudes and behaviors in the workspace are traditional habits which are considered as prevalent, even work accidents are considered as a risk and fate that they have to accept.
Reference

[1] Keputusan Menteri Tenaga Kerja Dan Transmigrasi 2014 Republik Indonesia Nomor 31 Tahun 2014 Tentang Penetapan Standar Kompetensi Kerja Nasional Indonesia Kategori Konstruksi Golongan Pokok Konstruksi Gedung Pada Jabatan Kerja Tukang Bangunan Gedung.

[2] Pangkey F, Malingkas G Y, and Walangitan D O R 2012 Penerapan Sistem Manajemen Keselamatan Dan Kesehatan Kerja (Smk3) Pada Proyek Konstruksi Di Indonesia (Studi Kasus: Pembangunan Jembatan Dr. Ir. Soekarno-Manado) Jurnal Ilmiah MEDIA ENGINEERING 2 2 100–113.

[3] Prastowo A 2011 Metode Penelitian Kualitatif dalam Perpektif Rancangan Penelitian (Yogyakarta: Ar Ruzz Media)

[4] Creswell J W 2014 Research Design: Qualitative, Quantitative and Mixed Methods Approaches SAGE Publications, Inc.

[5] Denzin N K and Lincoln Y S 2000 Handbook of Qualitative Research (New Delhi: SAGE Publications)

[6] Undang-Undang Nomor 13 Tahun 2003 Tentang Ketenaga Kerjaan. Badan Pusat Statistik Nasional, 2015. Badan Sertifikasi Keterampilan

[7] Eaves S, Gyi D E, and Gibb a G F 2016 Building healthy construction workers: Their views on health, wellbeing and better workplace design Applied Ergonomics 54 10–18

[8] Piri S, Sompie B F, and Timboeleng J a 2012 Pengaruh Kesehatan, Pelatihan Dan Penggunaan Alat Pelindung Diri Terhadap Kecelakaan Kerja Pada Pekerja Konstruksi Di Kota Tomohon Jurnal Ilmiah MEDIA ENGINEERING 2 4 219–231

[9] Wicaksono I K and Singgih M I 2011 Manajemen Risiko K3 (Keselamatan dan Kesehatan Kerja) Pada Proyek Pembangunan Apartemen Puncak Permai Surabaya Prosiding Seminar Nasional Manajemen Teknologi XIII 3

[10] Public Communication Bureau of the Ministry of Public Works and Housing 2015

[11] Kim Y, Park J, and Park M 2016 Creating a culture of prevention in occupational safety and health practice Safety and Health at Work 7 2 89–96