

THE IMPLEMENTATION OF OCCUPATIONAL HEALTH AND SAFETY FOR PREGNANT WORKERS IN VARIOUS WORKPLACES

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Abstract : Pregnant workers have more health risks for health problems than other workers. There are different potential hazards in different workplaces. Occupational Health and Safety Programs need to be implemented for pregnant workers in order to avoid work related diseases in various workplaces. This study aims to determine the the implementation of occupational health and safety for pregnant workers in various workplaces. This study uses a qualitative method by conducting FGD (Focus Group Discussion) with pregnant women workers from various workplaces and in-depth interviews with occupational health and safety experts. Occupational health and safety programs have been implemented for pregnant workers such as the right to maternity leave, working hours arrangements, health insurance, and special protection for pregnant workers. However, there are some workplaces that still do not provide special protection for pregnant workers. Every workplace should pay more attention to the health and safety of pregnant workers as an effort to prevent occupational accidents and work related diseases.

Keywords: health, safety, pregnant, workers.

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1. INTRODUCTION

Occupational Health and Safety is a must for companies to protect workers from health and safety risks, as well as increasing company productivity. If the health and safety of workers are well maintained, the morbidity, absenteeism, disability and work accidents can be minimized, so that healthy and productive workers will be realized. Company profits are also influenced by worker productivity, which is closely related to occupational health and safety.

Law of Republic Indonesia Number 1 of 1970 concerning Work Safety as the legal basis for implementation of safety work in Indonesia and Law of Republic Indonesia Number 36 of 2009 concerning Health states that all workplaces are required to implement health efforts both in the formal and informal sectors. Article 5 of the Law Number 13 of 2003 also explains that every worker has equal opportunity without discrimination to get a job, including women workers.

The current equality of working opportunities has increased the interest of female workers to actively participate in working. This provides an opportunity for women workers to develop their personal abilities through various types of work. Women workers have received special attention in the world of work. This is due to the complex problems faced by the female workforce itself, both in relation to developing their personal potential and in relation to family and community life at the same time (Hakim, 2012).

In Indonesia, female workers are protected by the Major Labour Laws of Indonesia. The protection includes the right to menstruation leave, maternity and childbirth leave, the right to breastfeed or pump breastmilk, the right to take leave when miscarriage, prohibition of layoffs due to marriage, pregnancy, childbirth and special rights during certain working hours. Pregnant women workers have more risks than mothers in general to be exposed to various pregnancy problems (Akbar et al., 2019). Female workers will be exposed to reproductive hazard which can potentially cause pregnancy disorders and complications in female workers. 78% of female workers have experienced reproductive health problems from mild to severe, 75% are exposed to noise and 78% work in rooms with hot temperatures. Risk factors from noise and hot temperature in work environment have the potential to cause various health problems both to the mother and to the fetus that the mother is carrying (Akbar et al., 2019).

The work environment can create various health problems for female workers. Risk factors in the work environment vary widely from physical, biological, chemical, psychological, physiological, ergonomic and other according to the workplace. Unorganized company environment, working too long time without rest, poor supervision of work environment, well-executed procedures, various hazards in the work environment can result in health problems for female workers. Every female worker, especially pregnant women, has different bodily powers, although in general the company should have carried out regular medical examinations.

Several studies have shown health problems due to the work environment in pregnant women workers. Work can affect the health of birth in women such as miscarriage, premature birth, reduced opportunities for breastfeeding, and so on. Disturbances in pregnancy, childbirth, breastfeeding and parenting will affect maternal health and child development (Darwin & Wijaya, 1994). Health problems in female workers can range from mild to severe. These disorders have long-term impacts such as premature babies, miscarriage, breast milk is not smooth and others. The results of research by Akbar et al., (2019) state that female workers who experience pregnancy disorders that the rights that must be obtained by female workers according to the Major Labour Laws of Indonesia have not been fully granted by the company.

Research by Darwin & Wijaya, (1994) concluded that working women have a risk of experiencing reproductive health problems. Health problems can be influenced by the work environment. A noisy work environment can directly cause health problems for female workers. According to research by Martiana et al., (2018) exposure to noise that exceeds the Threshold Value (TLV) continuously can cause infertility, premature birth and miscarriage. Indirectly, noise in the workplace can cause hearing loss in babies. The Swedish Work Environmental Authority recommends that pregnant women should be protected from exposure to noise in excess of 80dB.

The International Labor Organization which aims to improve social protection and address various problems related to the world of work has given full attention to pregnant women workers by issuing the Convention on the Protection of Pregnant Women. This Convention applies to women employed in industrial and non-industrial activities. Occupational health and safety is important for pregnant women workers to be protected from the risk of interruption in pregnancy. For this reason, it is necessary to know the extent of the application of occupational health and safety in various industries.

Based on the background and problems described above, the objectives to be achieved from this study is analyzing the implementation of occupational health and safety in pregnant women workers in various workplaces.

2. METHODS

This research uses qualitative methods by conducting in-depth interviews and FGD (Focus Group Discussion), which is to obtain more information about the implementation of

occupational health and safety to pregnant women workers in various workplaces, and to obtain information about the occupational health and safety program in the workplace, working hours of pregnant women, working conditions in various industries, and the aspirations of these pregnant workers towards the implementation of occupational health and safety in the workplaces.

The selection of informants is done by following the principles of adequacy and suitability. The principle of adequacy means that the data obtained from the informants are expected to describe the phenomena related to the research topic, while the principle of suitability means that the informants are selected based on their relationship with the research topic. The informants in this study were pregnant women workers from various workplaces such as hospitals, food industry, mining industry, cigarette industry, educational institutions, construction sector, and government institutions, also the occupational and safety experts as key informants.

Data collection was carried out by researchers by collecting primary data and secondary data. Primary data obtained based on the results of in-depth interviews (in-depth interviews), namely information and information obtained orally from informants through meetings and conversations as well as Focus Group Discussions (focus group discussions) where a group of people discuss according to the direction of the researcher as a moderator or facilitator. Secondary data were obtained from reports relating to the problems studied. To assist during the data collection process, the researcher used an in-depth interview guide that contained a list of questions related to the topic to be studied. In accordance with the characteristics of qualitative research, the research instrument is the researcher himself. In the implementation of FGDs and in-depth interviews, researchers used FGD guidelines and in-depth interviews accompanied by questions related to the material to be presented.

Efforts to maintain the validity used in the study are data triangulation methods, which are checking data from various sources in various ways and at various times (Sugiyono, 2010). In this case the researchers used source triangulation and method triangulation. Source triangulation was carried out by looking for data from various interrelated sources, and researchers conducted exploration to check the credibility of various sources (Komariah, 2010). Method triangulation using more than one method, namely in-depth interviews and focus group discussions (FGD).

3. RESULT AND DISCUSSION

The main informants in this study were 8 pregnant women workers from 8 different workplaces who were selected based on predetermined criteria. The characteristics of worker informants consist of age, education, length of work, and type of industry / workplace.

Table 1 The Characteristics of Main Informant

No.	Informant Code	Age (Year)	Education	Length of work (Year)	Workplace
1.	IA1	26	D3	3	correctional institution
2.	IA2	25	S1	2	hospitals
3.	IA3	27	S1	2	food industry
4.	IA4	25	S1	4	mining industry
5.	IA5	28	S1	4	cigarette industry
6.	IA6	25	S2	2	educational institutions
7.	IA7	27	S1	4	construction sector
8.	IA8	30	S1	6	government institutions

Based on table 1 shows that the main informant consists of 8 people. There were 3 informants aged 25 years, 2 people aged 27 years and the rest 26, 28, and 30 years. The last education is D3 with 1 person, the latest education is S1 with 6 people and S2 is only 1 person. The informants have worked 2 to 6 years in their respective workplaces. Informants come from various workplaces such as correctional institution, hospitals, food industry, mining industry, cigarette industry, educational institutions, construction sector, and government institutions.

In addition to the informants above, there are key informants in this study, namely occupational health and safety experts who have experience working in the Health Safety Environment (HSE) department. Based on table 2 shows that the key informants in this study consisted of 2 people. Key informants were 27 years and 28 years old. The two key informants have S1 education and have worked as safety officer for 2 years and 5 years.

Table 2 The Characteristics of Key Informant

No.	Informant Code	Age (Year)	Education	Length of work (Year)	Workplace
1.	I.B1	27	S1	2	HSE department
2.	I.B2	28	S1	5	HSE department

The Occupational Health and Safety (OHS) program is a system designed to ensure the good safety of all personnel in the workplace so that they do not suffer injuries or cause disease in the workplace by complying with the laws and regulations on occupational health and safety, which are reflected in change in attitude towards safety in the workplace (Dewi, 2006). Based on the results of interviews with the main informant, it was found that almost all workplaces have implemented several occupational health and safety programs. The programs implemented include preparedness programs for emergency or natural disasters, self-evacuation training, OHS training for some workers, OHS inhouse training, fire simulation, training for using light fire extinguisher, installation of OHS signs, OHS bulletin, medical checkup, hazard communication, and electrical safety. This is in accordance with what was stated by the main informant as follows: *"Yes, OHS Training (Inhouse OHS training, fire simulation, light fire extinguisher usage training etc.), Installation of OHS signs, OHS Bulletin, and medical check up"* (I.A1). This was also said by the key informants as follows: *"In various companies usually have implemented various occupational health and safety programs such as hazard control and handling of hazards in the workplace"* (I.B1). The implementation of Occupational Health and safety is carried out by providing the need for Personal Protective Equipment (PPE) according to standards, training and socialization regarding work procedures, emergency response procedures, first aid in accidents, and increasing workers' insights regarding work hazards and risks faced.

Occupational Health and Safety (OHS) is one of the health and safety efforts in the work environment which aims to improve the quality of life and increase worker productivity. Thus, this will have an impact on company profits. Work safety has been regulated in Law No.1 of 1970 concerning work safety in article 3 paragraph (1) and article 9 paragraph (3), with the laws and regulations stipulated work safety requirements to prevent and reduce accidents, prevent, reduce and extinguish fires, prevent and reduce explosive hazards, provide opportunities or a way to escape during a fire or other dangerous incident, provide assistance to accidents, provide personal protective equipment for workers, prevent and control the occurrence of diseases work both physically and psychologically, poisoning, infection and transmission, maintaining cleanliness, health and order, obtaining harmony between labor, work tools, working environment and work processes, and adjusting and perfecting security in

jobs where the danger of accidents is getting higher. Meanwhile, occupational health has been regulated in Health Law no. 23 of 1992 Part 6 concerning Occupational Health, Article 23 which written that occupational health is organized to achieve optimal work productivity, occupational health includes protection of occupational health, prevention of occupational diseases, and occupational health requirements, and every workplace is obliged to provide occupational health.

According to Argama, (2006) the Occupational Health and safety (OHS) program is a program system designed for workers and employers as an effort to prevent (preventive) the occurrence of occupational accidents and diseases due to work relations in the work environment by identifying potential things cause accidents and occupational diseases due to work relations, and anticipatory action when such things occur. The potential for hazards in the workplace varies depending on the work environment. An informant who works in the construction sector stated that the uneven road conditions around the workplace is one of the dangerous risks for pregnant women. For workers in the food industry, the source of danger is physical hazards, namely hot rooms and chemical hazards from evaporating liquids in the Quality Control laboratory, as well as dust from flour & seasoning. According to workers, the company has provided protection from these dangers, such as early detection of disease and availability of personal protective equipment and means of evacuation in case of physical danger. this is as said by the informant: *"yes, there is protection in that condition. availability of early detection and personal protective equipment as well as means of evacuation in case of physical danger."* (I.A1).

Based on the results of interviews with key informants, there are various potential hazards in the workplace that pose a risk to pregnant women, such as chemical hazards from chemicals in the workplace, physical hazards such as noise, vibration, high temperatures, psychological hazards such as stress, and biological potential hazards for pregnant women who work in hospitals. *"Potential hazards in the workplace can range from chemical, physical, biological, to psychological hazards"* (I.B2). In some workplaces there are chemicals used in the production process which, if continuously exposed to pregnant workers, will have an impact on the health of the fetus. The chemicals already in a mother's body can be passed on to her developing baby during pregnancy. Many chemicals toxic can enter a pregnant woman's body, such as lead and mercury. These chemicals can be transferred to the growing fetus through the placenta and eventually harm the fetus (The Hesperian Foundation, 2010).

Occupational Health and Safety has also been stated in Article 86 paragraph 2 number 31 of Law Number 13 of 2003 which confirms that every worker / labourer has the right to obtain protection for occupational health and safety in order to protect the safety of workers / laborers in order to achieve optimal work productivity, measures for occupational health and safety shall be carried out. According to the International Labor Organization (ILO), Occupational Health and safety is an effort to maintain and increase the highest degree of physical, mental and social welfare for workers in all positions, prevention of health deviation among workers caused by working conditions, protection of workers in work from risks due to factors that are detrimental to health, placement and maintenance of workers in a work environment adapted to physiological and psychological capabilities; and summarized as a job adaptation of humans and every human being to his position. According to Mangkunegara (2016) that the goals and benefits of occupational health and safety are so that every worker gets a good health and safety guarantee physically, socially, and psychologically, in order to avoid health problems caused by the environment or working conditions, and every worker feel safe and protected at work. The goals and benefits of occupational health and safety cannot be realized and the benefits are felt, if only rely on the role of the workforce but also the role of the leadership.

Several companies have provided special protection for pregnant women from these potential dangers and get protection in doing their work. *"So far this is enough, pregnant women get work protection"* (I.A7). Every workplace should implement various OHS programs to protect its workers from various potential dangers, including for pregnant women. *"Yes, every company is obliged to protect pregnant women with the OHS program for pregnant women at work"* (I.B1). The OHS program for pregnant women that is implemented in the workplace includes a leave program for pregnant women, shifting work shifts, counseling on the health of pregnant women, and data collection on the health of pregnant women every month. This is in accordance with what the informant said *" shifts for pregnant women, counseling on the health of pregnant women, as well as data collection on the health of pregnant women every month."* (I.A2). However, there are some working mothers who do not know about the OHS program specifically for pregnant women in their workplace.

The OHS program for pregnant women is important not only for their physical health but also for mental health. According to Mangkunegara (2016), occupational health indicates a condition that is free from physical, mental, emotional, or pain disorders caused by the work environment. Health risks are factors in the work environment that work over a defined period of time that can help with emotional stress or physical distress. Mangkunegara (2016), also states that work safety shows a safe or secure condition from suffering, damage or loss in the workplace. Safety risks are aspects of the work environment that can cause fire, fear of electricity, cuts, bruises, sprains, fractures, loss of organs, vision, hearing, all of which are often related to company equipment or the physical environment and include tasks. work that requires maintenance and training. Maternity leave for pregnant women needs to be given so that the mother has adequate rest time and it can also affect the mental health of the new mother. Some companies arrange maternity leave schedules for their workers in such a way, but there are also those that allow workers to set their own leave schedules so that workers can be free and focused during the recovery period and make the best use of their time for their babies. The physical condition and hormonal changes of a woman during pregnancy and her struggles in childbirth, of course, also affect their performance.

Article 82 (1) of the Major Labour Laws No.13 of 2003 states "Workers / women workers have the right to get a break for 1.5 (one and a half) months before the time to give birth to a child and 1.5 (one and a half) months after giving birth according to the calculation of the obstetrician or midwife." All informants in this study stated that each workplace regulates the time off for pregnant women. the applied leave time is 3 months on average for each workplace. However, there was 1 informant who said that at his workplace, pregnant and giving birth mothers were allowed to take 6 months of leave but were not given 3 months of wages. *"Maximum of 6 months. 3 months with salary, the remaining 3 months without salary"* (I.A5). In America, the average duration of leave taken during the twelve month period after delivery is 72.51 days or 2 to 3 months (Dagher et al., 2014). Maternity leave is very important because it also affects the mental health of workers. The results of a study by Dagher et al., (2014) showed that new mothers who took time off from work less than six months after giving birth appeared to have an increased risk of postpartum depression symptoms. Research findings indicate the importance of leave as a protective factor for women's mental and physical health.

Article 76 (2) of the Major Labour Laws No.13 of 2003 states "Entrepreneurs are prohibited from employing pregnant women who could be dangerous to their womb and themselves". Companies or business owners are obliged to guarantee protection for female workers who are pregnant because women who are pregnant are more vulnerable than other workers. Protection provided such as not giving out-of-town assignments that require using air transportation in the first trimester of pregnancy, or avoiding heavy work for factory workers. The results of this study indicate that some workplaces do not employ pregnant women to locations that endanger the health of the mothers, as conveyed by the informants that for the

first trimester of pregnancy, superiors do not give out-of-town tasks that have to use air and land transportation. For the next semester, the boss asked in advance whether it was possible if assigned out of town. The informants also said that the company where they work has registered all of its workers with the Health Insurance, which covers costs for health services for antenatal care and childbirth. In this study there were also informants who said that they were still working in locations that were not safe for pregnant women, namely construction workers who did require these workers to continue working through potholes. This was conveyed by the main informant as follows: *"there is no difference between pregnant and non-pregnant workers, the road to the work location is a road with potholes and is a risk for pregnant women"* (IA7).

The Minister of Manpower Regulation No. Permen 03 / Men / 1989 regulates the prohibition of layoffs for female workers on the grounds of marriage, pregnancy, or childbirth. The same thing is also stated in the ILO convention No. 183 of 2000 article 8, "Upon returning to the workplace, companies are prohibited from discriminating against female workers who have just returned after maternity leave. They have the right to re-occupy their position and receive a salary equal to the salary they received before maternity leave. " All informants in this study stated that after the female workers at the company finished maternity leave, they would return to work and occupy their original positions.

Article 76 of the Major Labour Laws No.13 of 2003 states, "Companies are prohibited from employing pregnant women workers between 23.00 and 07.00 hours. In addition, the company is obliged to provide shuttle transportation for female workers, pregnant or not, who have shifts to and from between 23.00 and 05.00." One of the informants mentioned that at his workplace there is a night shift. There is no shuttle service for the workers, but workers who work during the night get additional consumption of milk. *"Yes, there is no transportation service, but shift workers get additional milk"*. (IA3). Providing additional intake for female workers is also a program that can maintain the health of female workers. Women's nutrition has a positive influence because healthy women can fulfill various roles to have healthy children and maintain the health of their family members (Priyadarshini, 2016).

The ILO as the International Labor Organization which aims to improve social protection and address various problems related to the world of work has given full attention to pregnant women workers by issuing the Convention on the Protection of Pregnant Women. Protection of the Health of Women Workers during Pregnancy i.e. Night work and overtime work should be prohibited for pregnant women and women caring for children and their working hours should be planned in such a way as to ensure adequate rest periods. This is also regulated in the Major Labour Laws of Indonesia. Employment of a woman in a job that is detrimental to her health or the health of her child, as determined by the authorities, must be prohibited during pregnancy and until at least three months after giving birth and longer if the woman is caring for her child. Women who are employed in jobs determined to be harmful to health by the authorities, have the right, without loss of wages, to be transferred to a type of work that is not dangerous to their health. The right should also be granted for reasons of pregnancy in individual cases for women who submit medical statements stating that a change in the nature of their work is necessary for the health of her and the health of her child.

4. CONCLUSION

Occupational health and safety programs have been implemented for pregnant workers such as the right to maternity leave, working hours arrangements, health insurance, and special protection for pregnant workers. However, there are some workplaces that still do not provide special protection for working pregnant women. Every workplace should pay more attention to the health and safety of pregnant workers as an effort to prevent occupational accidents and diseases.

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