



PROCEEDING

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INTEGRATED VECTOR MANAGEMENT

Health and Environmental Perspectives

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International Seminar Integrated Vector Management:
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PREFACE
CHAIR OF THE ORGANIZING COMMITTEE

In order to commemorate the 56th Anniversary of Diponegoro University as well as the mosquito day, School of Public Health held an international seminar.

Mosquito is a low-level organism including ancient invertebrates category. Characteristic of the low-level organisms are their ability that is very adaptable, so the mosquitoes still existed from the beginning until now. The ability of mosquitoes and insects is directly related to our efforts to control them. The organization th at control of vector and pest organisms currently is undertaken by the field of Health and Agriculture, and is mostly done using pesticides and insecticides.

Experience of WHO and USAID in using pesticides and insecticides from year to year in developed and underdeveloped countries in the world we can learned. This international seminar is our media to sit together and discuss their experiences in the field of health and agriculture to take a good benefit.

Will we continue to use pesticides? Is this time our farmers have been using pesticides safely? How to use pesticides safely, rational and produce minimum impact of health? Our homework on this case still a lot.

We hope that as an agricultural country, Indonesia will have a strong, healthy and fit farmers with agricultural products that are safe for the people consuming the product.

Organizations that associated with mosquito and vector control is Epidemiologist and Environmental Health. In this seminar occasion Entomology Society of Indonesia and Indonesia Environmental Health Spesialist Association opened a new member.

Besides seminars, other events that held are workshop and discussion of work. There are three workshops held to commemoration the mosquito day. Firstly Workshop about Molecular Entomology "Detection Sibling Vector and Dengue Virus" and the secondly Workshop about "Pesticides in Technology and Application", while the Thirdly Workshop about ISO 14001 Environmental Management System and EHSA.

We would like to say thank to the Committee who h ave worked hard to be able to organize this Workshop and Seminar. In particular, we also offered his congratulations and thank you to participants who interest to this event, members EHSA and ESI to present the results of research and thinking and at the s ame time we ask apologize for not all of the proposals can be presented. Our deep appreciation also goes to the keynote speakers and invited speakers.

Thank you also to all the people who have worked for the Workshop, Seminar and Work Dissucion thus lively and productive. Finally, we congratulate conduct workshops and seminars to commemorate the 2013 mosquitoes day. We hope that in the future we can continue to live in a healthy life, may Allah SWT bless our activities, Aamiin Yaa .. Robbal Alamin ....

Semarang, October 26, 2013

Committee

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ANALYSIS ON KNOWLEDGE AND ATTITUDE OF EMPLOYEES' ACTICESIN APPLYING BBS (BEHAVIOR-BASED SAFETY)PROGRAM AT PESTICIDE FORMULATION COMPANY

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ABSTRACT

ground: Many efforts have been done to create a healthy workplace and accident ention, including the introduction of behavior-based safety program (BBS), by ging unsafe into workers' safe behavior. Pesticides Formulation Industry in rang has been applying BBS since 2005, but the implementation was not optimal. e were some problems in communication and only permanent employees emented BBS program. The aim of this study was to analyze knowledge and des of the employees in implementing BBS program (Behavior-Based Safety) in cides formulation industry in Semarang.

hod: This study used qualitative method by in-depth interviews, observation and ment review. Subjects were 6 employees in Pesticides Formulation Industry in arang. Triangulation informants were the supervisor and SHE officer.

lt: The results showed that the problems in the implementation of BBS program in cides Formulation Industry in Semarang were: the workers only fulfilled their tasks et award; BBS checklist items were unspecialized for each profession and unit uction; lack of managers attention for non permanent employees. The results also cated that subjects' knowledge were not correspond to their attitude and practices in program.

words: Knowledge, Attitude, Practice, Behavior Based Safety (BBS)

BACKGROUND

Occupational Safety and Health (OSH) is an effort to protect workers, the pany, the environment and the surrounding community from exposure to hazards in workplace. In the era of globalization requires the implementation of Occupational ty and Health (OSH) in every workplace including in industry, it is necessary to elop and improve the OSH in order to minimize the risk of accidents and illness ng from work, as well as increase productivity and efficiency [1].

The accidental of work can occur because of two main factors : unsafe behavior unsafe condition. According to data of "Biro Pelatihan Tenaga Kerja", the causes of k accidental are unsafe condition such as careless behavior, do not comply with ulations, incompliant of work standard procedure, not wearing personal protective ipment, and weak physical condition. Percentage of causes of accident are 3% due to sons that can not be avoided (such as disaster), 24% due to environment or ipment that do not qualify, and 73% due to unsafe behavior. Effective way to vent accidents is to avoid the occurrence of five unsafe behaviors mentioned above

Various attempts have been made to create a healthy workplace and safe from accidents, include introduce a behavior-based safety program or BSS, which emphasizes the aspects of unsafe behavior [3]. The purpose of the Behavior-Based Safety is changing the behavior of employees from unsafe behavior into safe behavior [4]. The behavior-based safety techniques consist primarily of employee training on safe and risky behavior, observation, intervention and feedback [5,6].

BBS program requires the cooperation and participation of workers, since the program is aimed at changing the behavior of the workers themselves. Behavior of individual workers in the company are very different from each other in the manner and under certain conditions, to change the behavior of workers who initially had a habit takes a long time and is not easy in implementation.

Companies of pesticide formulation have been using the BBS since 2005. BBS program before being applied to the employee, in advance socialized with training on employee. However, in its application is not maximized, seen from the incidence of first aid and near misses during the year 2011 in the Company of pesticide formulations monthly is likely to increase. Up to 73.68% of the cases occur as a result of unsafe behavior of employees. Therefore, purpose of this study was to analyze the knowledge and attitudes with employee practices in implementing BBS (Behavior-Based Safety) in pesticide formulations company in Semarang.

METHOD

The research method used was a qualitative-oriented method with inductive logic (getting the idea by examining inductively from specific data to more general data) [7]. The purpose of qualitative research is to develop concepts that help further understanding the social and behavioral phenomena in the natural background [8].

Purposive sampling was used to select study subjects with criteria as follow: (a) Permanent employees in the production department which included the BBS program; (b) Had attended training or training on BBS; (c) Men or women; (d) Willing to provide information when interviewed. Number of study subjects were 6 employees in the production department, because of the six employees have obtained appropriate information and research purposes of data saturation occurs (saturation information).

The main data sources in qualitative research is the words and actions, the rest is additional data such as documents and other [9]. Data collection used interview, observation, documentation writing, and literature. Means of collecting data in the form of an interview guide to measure knowledge and attitudes, while the practice of using a checklist to measure.

Triangulation is a technique that utilizes data validity checking something else out that data for checking purposes or as a comparison to the data. Triangulation with source can be achieved by comparing the employees covered by the BBS program and supervise officers of SHE.

RESULT

BBS program (Behavior-Based Safety) in pesticide formulations applied to the *ompany since 2005 with reference to the Occupational Health and Safety Resource* lanual that is used by the industry. Coverage of the program BBS (Behavior-Based afety) in company of pesticide formulationare permanent employees in all areas of the ompany, the contract length that employee's annual contract period, while contract mployees in this short-term contracts are not included in the monthly contract mplementing BBS program. Any rewards for employees who are able to assess the BS on schedule, which is 2 times during the months of the year. BBS program overall iape in the Chemical Industry includes assessment of BBS (Behavior-Based Safety) mployees in the form of employee behavior observation or observation made by hers, after the observation of some employees collected later in the recap into one by ouping any unsafe behavior the employee, how the response or feed back employee as observed, and the recommendation of the observer.

Results of in-depth interviews were conducted to study subjects related to nowledge of the subject of the application BBS program in pesticide formulations ompanyknown that, all study subjects had knowledge of the BBS program. This is ident from the study subjects were able to answer and explain the definition, easures, and how the implementation of the BBS program.

The attitude shown through the responses of research subjects, assessment and inion on the implementation of the BBS program is also supportive, accepting and mplementing the program with the assumption that the BBS program aimed at mployees own safety. Despite the BBS program will increase the workload, eventually search subjects willing to accept and implement the BBS program for reasons of an signment or order of management. In addition, because the rewards make employees erform BBS program in order to find the reward.

Result of assessment of the 6 subjects of research on the practice of application the BBS program, only 2 subjects that is fully safe behavior as a form of mplementing BBS program. Most of the research subjects is not fully safe behavior is a rm of practice level who have not been able to do something with the settings utomatically, or something is not a habit.

Most subjects showed no correspondence between knowledge with practice in plying the BBS program. From interviews regarding knowledge, study subjects were le to answer and explain how the implementation of the BBS program. While in actice, most of the study subjects have not fully implemented the BBS program utcomes assessment in terms of safe behavior observation. The results also showed at attitude of research subjects included in the definition does not fit or do not depend n each other to practice. Though being contributed, accept and implement the BBS ogram, but in practice does not fully implement the program. The research subject is nly responsible for the reason of the assignment or order management. When a mmand is part of the task, the research subject was going to carry out. In addition, the wards for those who filled the form BBS made the subject simply fill out the form BS. Ultimately the responsibility to implement and properly familiarize BBS program as not materialized.

DISCUSSION

The sense Behavior based safety (BBS) is the use of behavioral psychology to promote savety [10]. BBS programs aim at the company of pesticide formulations in line with the understanding Behavior -Based Safety by Geller, an application of the behavioral sciences that deal with safety issues at work. Behavior based safety focuses on what others are doing, and then analyze why they are doing it and finding appropriate interventions to improve the ability of the person. BBS is usually used to change the behavior of workers insecure behavior become safe behavior to prevent accidents. So, with the increase in safe behavior also will be achieved the success [4]. This pesticide formulations company employs more contract workers than permanent employees, but the implementation of the program BBS (Behavior-Based Safety) only applied to permanent employees in all areas of the company. Employees who conduct assessment BBS (Behavior-Based Safety) is appointed and training or training in BBS.

Assessment the BBS (Behavior-Based Safety) schedule of employee has been determined by the section Safety, Health and Environment at the company, which is 2 times every month. Observers will get a different area or perform rolling/change place every month in assessing BBS. Safety requires a collaborative process where everyone in the company to participate to create a safer workplace, especially given that the company produces toxic substances that are harmful to human health. With the growing culture of engagement and participation, can be achieved zero injuries. Involvement in safety is ultimately benefit employees and the organization. Every worker has something meaningful to contribute, and people will contribute if the climate is right [13].

All research subjects had good knowledge about the BBS program. Indicated that the subjects were able to answer and explain the definition, measures, and how the implementation of the BBS program. This is consistent with the results of Latifatul Mufarokhah that indicates a link between safety knowledge with the implementation of accident prevention [11].

Attitude shown through the responses of research subjects, assessment and opinion on the implementation of the BBS program is also supportive, accepting and implementing the program with the assumption that the BBS program aimed at employees own safety. Although the BBS program will add to the burden of work, research subjects willing to accept and implement the BBS program for reasons of an assignment or order of management. Companies provide rewards to employees who perform BBS program. It is also one of the things that encourages employees want to implement this program. This result is in line with research Yusri and Johnny Situmorang stated that the attitude towards safety in industrial environments showed a good response, although there are some good responses but are less likely to be many who showed a good response to occupational safety [12].

Most subjects showed no correspondence between knowledge with practice in applying the BBS program. Based on the results of the interviews showed that the expression of knowledge study subjects were able to answer and explain how the implementation of the BBS program. But the safety assessment of the behavioral observation study subjects showed most of the study subjects have not been fully implemented BBS program. This result is in line with research showing that

Mahachandra and Manik, OSH knowledge did not correlate significantly with the implementation of OSH management [13].

Attitude research subjects included in the definition of nonconformity or not independent of one another with his behavior. When linked with the practice in implementing BBS, attitude is subject of a study contribute to support, accept and implement the BBS program, but in practice does not fully implement the program. The research subject is only responsible for the reason of the assignment or order management. In addition, the rewards for those who make the subject fill the BBS just fill out the form.

Knowledge levels of the subjects included in the study can answer and explain it. Research subjects can recall previously learned material, in this case is the BBS program. In addition, the research subjects were able to explain, cite examples in the BBS program and implement the company. Most of the new subjects are at levels not describe the next level of analysis, ie the ability to describe the BBS program material that has been studied according to the situation or the actual condition.

Attitude on the subject of new research levels receive, respond to and appreciate the application of the BBS program, not to be responsible for the implementation of a voluntary program and not make it as a basic requirement in safety work. Although the research subjects applying one form of form filling activity BBS, it was not because of the awareness of the urgency of the BBS program, but for some reasons such as: (a) a tendency toget reward; (b) willingness to participate in our study only by reason of the assignment or order management. In addition, the reward for a full charge, making the subject simply fill out the form BBS. There is no responsibility to familiarize implement the BBS program and practicing safe. DePasquale and Geller mentioned five variables significantly predicts meaningful employee involvement in the process of BBS: (1) The perception that BBS training is effective; (2) Belief in the ability of management; (3) Accountability or responsibility for the BBS through performance assessment; (4) Whether a person receives education on BBS; (5) The term of office with the organization [14]. So the factors that affect the implementation constraints BBS program at the company's pesticide formulations because of their responsibility for the BBS have not really in order to familiarize the BBS, but the chase and meet the award provided by the company.

According to the informant triangulation, lack of programs such as the items in the checklist BBS BBS is too much, the lack of attention from management to employees short contracts, and less management attention in the follow-up data collection results from the application BBS program.

CONCLUSION

Description of program implementation BBS (Behavior-Based Safety) in pesticide formulations company is BBS program implemented since 2005, the BBS program coverage permanent employees and contract employees with long-designated assessment schedule BBS 2 times per month and each month rolling assessment locations, as well as there is a reward voucher when employees make an assessment on schedule with full BBS.

There is no correspondence between knowledge and attitude to the practice of the majority of the research subjects in applying the BBS program. Because of the

knowledge that has not been able to describe the BBS program material that has been studied according to the actual situation or condition, reflects the attitude of the research subjects only to fulfill the duties and pursue awards provided by the company, so the practice does not fully implement the BBS program.

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