

THE CONCEPT OF ESTABLISHING AUTONOMOUS OCCUPATIONAL SAFETY AND HEALTH IN HOSPITALS: AN ABSTRACTION PROPOSAL

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Currently, in many hospitals in Indonesia, the Occupation Safety and Health Committee in the Hospital (OSH-CH) is evenly distributed. It is based on the instruction of the Health Department of the Republic of Indonesia that obliges each hospital to establish the committee the main function of which is to prepare necessary equipment for risk management essential in the hospital. OSH-CH must also be responsible for upgrading the accreditation process of the hospital as to work units on occupational safety, fire control and disaster preparedness. However, in fact, OSH-CH has insignificant power as many people, especially the manager of the hospital, may expect. OSH-CH tends to be stagnant and irresponsive. In other words, it tends to be non-professional. The reasons are: (1) the staff of OSH-CH work as part-timers, (2) they have minimum understanding about OSH, (3) they do not have incentive and enough budget, (4) it is only to show that the hospital "obeys" the orders of the authorities, (5) managerial support within the hospital is minimal, and (6) there are no significant cases of work-related accidents and illnesses. These explain the reasons why OSH-CH has no significant power and the progress of its program is so slow. For some large hospitals this often leads to inefficiency and ineffectiveness of the organization, and in some cases it may even tend to create difficulties in conducting risk control. Based on these reasons, it is recommended to establish an autonomous OSH work unit that operates on the basis of structural and formal organizational operations. The paper aims to discuss the proposed concept of the autonomous OSH work unit established in hospitals, particularly for large hospitals. It is urgent to develop long-term capacities of the unit to sustain its reliability.

Key words: occupational safety and health; hospitals; occupational safety and health committee; risk control; disaster preparedness.

INTRODUCTION

Dr. Sardjito Centre General Hospital has been one of the largest health institutions in Yogyakarta that has a complicated work system comprising many kinds of work units often with high risks within each unit. Workplace risk problems in the form of work-related accidents or illnesses in the hospital constitute the real world of loss potency in terms of human beings or material, in short or long term. Work accidents and illnesses frequently occur in hospitals so that the *zero accident* target as a humane and ideal work system can be rarely reached.

In this paper, the background of establishing an Occupational Safety and Health Division (OSH-D) in a hospital is described and its main functions and duties, organizational structure, equipment and facilities and work programs are discussed. These features are examined with a view to identifying the most important themes of the work unit and suggesting the need for internal and external cooperation for strengthening the activities of the unit.

The background of establishing an OSH Division

Currently, the hospital has an accreditation mechanism including the assessment of occupational safety and health (OSH) problems that has been improving all the time. It is important to note that there is an international standards known as International Standard Organization (ISO) 18000 (concerning the OSH management systems) and ISO 14000 (concerning the environmental management aspect). The former is concerned with OSH that nowadays has been an important issue in industry, including the service industry such as hospitals, while the latter deals with environmental management. The contents of the latter are by and large similar to those in OSH. It is obvious that OSH is a real program that any kind of industry must deal with.

Dr. Sardjito Hospital has passed on its OSH based on the current criteria of the accreditation mechanism for occupational safety and health management systems. However, in practical terms, OSH has not reached the target or even the required standards. We need to understand that work being done is still at risk in the current health care situations. This suggests that OSH in a hospital is by no means a part-time job and requires full attention at all times. An integral system of hospital management is as important as environmental sanitation and industrial hygiene.

Main functions and duties

OSH-D has four main functions and duties that fulfill important and urgent roles of the division as an implementation unit of continuous, procedural and systematic programs. The following are main functions and duties of the division:

1. Inspection:

To inspect the means to investigate, control and monitor any kinds of activities done in work units of the hospital in order to meet the demands of established OSH rules and guidelines, in the form of laws, government regulations or rules of hospital management. One new thing in inspection is monitoring the maintenance process of the hospital, including planned and unplanned maintenance work. In this case, OSH roles inside the division are considered to be those of a supporting team applying asset maintenance techniques which are very beneficial in short, medium or long term.

2. Recommendation:

The main function of this recommendation is to give inputs about technical instructions and recommendations concerning the OSH aspect, particularly in installing and repairing any equipment, material use or new work methods. This includes involvement in discussing physical facility development, service or maintenance programs of equipment, materials or certain facilities, so that in the long run no crucial problems related to the imperfectness of the existing system will not be raised. For example, building a room without considering its layout efficiency makes it difficult to operate and maintain the health care services, which is often the case in many work sites.

3. Socialization:

This is a heavy duty because it is concerned with systematic efforts to raise awareness or enlighten all the staff members about *civitas hospitalia* so as to promote the understanding of the importance of OSH in work sites. This is a certainty attempted because its process is continued, targeted, conducive, and communicative with a view to producing changes in the system. Socialization (and performance assessment) is a prerequisite for the continual program implemented both formally or informally done, in training sessions or outside, in theoretical or practical terms and voluntarily or as part of compliance actions. It will be operated by schedules established based on priorities. OSH-D can do this alone or in cooperation with other units, for example, the Department of Public Health Socialization in Hospital and the Training Department.

4. Research and development:

This function covers all activities for studying or conducting research in a limited scale (particularly research for hospital priorities) about anything contributing to OSH research and development. It is equally important to publish internal (and external if affordable) periodic scientific journals or newsletters and to make use of the role of the hospital as a beneficial site for research and OSH practice. In the long run, this should lead to the establishment of an OSH research and development cen-

tre that could serve as reference for OSH science and application in the hospital.

Supporting personnel

The main functions and duties of OSH-D are implemented by qualified human resources, including those who have OSH formal education or those who have additional education concerning OSH with special qualifications. OSH formal education means that the person has gone through the subject at graduate level of education or profession in OSH. The reason to put this as a crucial qualification is that university education is viewed as a basic capital for science-based operation and its development. This ensures that application will be done professionally, without any additional finance for hospitals to educate its staff members formally. For this reason, we expect that the OSH program will work as targeted without any misinterpretation of basic substance and misunderstanding about existing problems. The qualification should also match with one of the main functions and duties of OSH-D in research and development problems. Table 1 mentions the personnel who support OSH-D that currently exists in Dr. Sardjito Hospital.

Table 1. Proposed personnel for OSH-D in Dr. Sardjito Hospital.

No.	Formal education	Educational background	Dutyl level
1	Postgraduate (Magister/Master)	OSH	Managerial
2	Diploma 3	OSH	Secretary and operator
3	Graduate or diploma 3	Environmental health	Operator
4	Vocational school	Industrial machinery	Operator

Note: The division needs one more person who is responsible for supporting administrative matters.

Table 1 shows that the hospital needs someone who has formal education at least at the level of Diploma 3 in OSH. To fill the vacancy, it should select a new staff member who has special qualification and experience of at least two years in OSH. For other personnel, it can take people from related work units. If it is required, the researcher has got the names of credible persons (good in performance, responsibility, and morality) to do this new job.

Organizational structure

Dr. Sardjito hospital has simple “line” organization, which defines specific functions of each work unit. The “command” function of the director in relation to subordinates does not operate by self-domination but togetherness. The director is not only the head of the managerial system but in a certain occasion also plays the role of an “operator” who analyzes real conditions in work units. This is shown in Figure 1.

Figure 1 illustrates that OSH-D has different positions so that each of them has specific functions as follows:

1. Director.
 - 1.1. Lead the unit and manage it based on the main function and duty of the work unit.
 - 1.2. Plan the duty regularly and monitor the operation done by subdivision coordinators.
 - 1.3. Apply a cooperative function with work units and teams in the hospital and coordinate OSH groups.
 - 1.4. Evaluate and control the duties based on the established work programs.
 - 1.5. Define and coordinate the research and development program in OSH science to subdivision coordinators.
2. General and Secretariat Subdivision.
 - 2.1. Carry out secretariat/administration duties concerning OSH-D, including determining the archive and library and OSH documentation and analysis of OSH data in general.
 - 2.2. Carry out inspection duties in the work units based on the established work program, and record activity results.

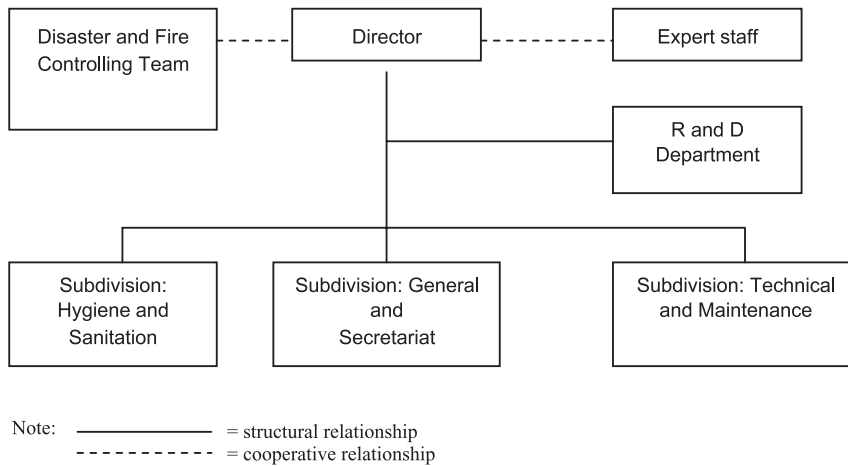


Fig. 1. Organizational structure of OSH-D in Dr. Sardjito Hospital.

- 2.3. Perform the completion of the hospital accreditation document on “OSH and disaster” and match it with real conditions.
- 2.4. Perform socialization duties in work units and provide any equipment needed.
3. Hygiene and Sanitation Subdivision.
 - 3.1. Perform analytical duties concerning OSH data that cover personnel, equipment and materials, work sites, work types, and methodical aspects concerning hygiene and sanitation problems.
 - 3.2. Perform inspection duties in the work units based on established rules of the work programs and record the results.
 - 3.3. Perform the completion of the hospital accreditation document on “OSH and disaster” and match it with real conditions.
 - 3.4. Perform the limited socialization program on work units under the general subdivision.
4. Technical and Maintenance Subdivision
 - 4.1. Perform analytical duties of OSH data that cover personnel, equipment and material, work sites, work types and methodical aspects concerning technical and maintenance problems.
 - 4.2. Perform inspection duties in the work units based on established rules on the work program and record the results.
 - 4.3. Perform the completion of the hospital accreditation document on “OSH and disaster” and match it with real conditions.
 - 4.4. Perform the limited socialization program on work units under the general subdivision.
5. Research and Development Department.
 - 5.1. Formulate OSH research and development concepts of the general division, hygiene and sanitation, technical and maintenance, and study OSH science in the hospital based on the demand of science and technology.
 - 5.2. Define the education and training program for external people coming from educational or non-educational institutions.
 - 5.3. Try to publish a journal as a means to inform, socialize and develop OSH aspects.
 - 5.4. Serve study and research activities done by OSH personnel outside or inside the hospital.

Equipment, materials and facilities

As a work unit, OSH-D has supporting equipment for its operation. This includes many kinds of equipment, materials and its facilities as primary substance or secondary one. Without them, the operation can never meet the expected target. Some of them are:

1. Equipment: (a) any kinds of personal protective devices, such as head and face protection, eye

protection, ear protection, hands protection, respiratory protection, industrial shoes, falling protection and industrial cleaning materials. The devices are not only supporting equipment but also socialization means (for education and training); (b) any kinds of detection/measurement tools such as lux meters, sound level meters, etc.; (c) any types of office equipment and basic materials needed every day including cameras.

2. Materials: (a) any kinds of work sheets describing guidelines or references, (b) any kinds of text books, pictures, maps, etc., to complete the library, including posters.
3. Facilities: (a) air-conditioned rooms for personal or meeting rooms, (b) tables, chairs, cupboards, filling cabinets and file boxes the numbers of which match with daily needs, (c) some whiteboards to stick and announce OSH information, (d) computer sets.
4. Supporting equipment: (a) co-cards or name cards that stick on work clothing, (b) equipment and materials to clean and maintain the asset of OSH-D.

Work programs

Based on the nature of its program, OSH-D has four different programs: (1) promotional program, (2) preventive program, (3) curative program, and (4) rehabilitative program. The most actively implemented programs periodically or simultaneously are promotional and preventive programs, while passive programs are curative and rehabilitative programs.

In executing the work programs there are three different kinds of timing, namely: (1) short-term program, (2) medium-term program, (3) long-term program, each of them having the following contents:

1. Short-term program (monthly).

The short-term program tends to be a monthly oriented project to make urgent changes especially based on danger risks and illness within the work units in the hospital. Actions taken on this program are:

- 1.1 Improving OSH-D management that fulfills administrative requirements.
- 1.2 Improving OSH groups in unestablished or established work units.
- 1.3 Systematic improvement of the hospital accreditation documents on OSH.
- 1.4 Work accident and illness risk investigation in work units, through elimination, substitution and protection actions as well as improving the incident and accident reporting mechanism.
- 1.5 Step-by-step socialization of OSH equipment in work units in turn using the central theme to make OSH staff aware.

2. Medium-term program (every six months).

The program has a six-month achievement project that implicates long-term purposes so as to improve the work systems in work units or controlling and monitoring them. The followings are examples of this program:

- 2.1 Improving all standard operating procedures, especially on danger risk jobs from the points of view of OSH along with all equipment manuals and instructions.
- 2.2 Improving management systems of all equipment, materials and tools (including physical building facilities), of medical or non-medical equipment. In this term, OSH-D works as a monitoring unit that supports maintenance activities. This function is so important that it should be understood well as a basic necessity in keeping unity and reliability of the hospital asset.
- 2.3 Improving the system of hospital accreditation documents on "OSH and disaster" to meet the demands in work units, especially repairing facilities that do not fit with parameters.
- 2.4 Increasing step-by-step socialization and OSH equipment socialization in work units in rotation using the central theme to make the staff aware of OSH, as well as applicative practices of personal skills in implementing OSH activities in each work unit.
- 2.5 Collecting the data relating to OSH in work units based on its scientific concerns such as: work study (methods study, work measurement, and work sampling/activity sampling), occupational safety, occupational health/industrial hygiene, security and ergonomics. The

purpose is to establish OSH science development and to make problem solving analysis easier.

3. Long-term program (annually).

3.1 Increase “commercial” services of accredited OSH training that other institutions (hospital or non-hospital) need. The program will organize the ongoing training activity by hospital OSH-CN.

3.2 Publish a periodical bulletin or journal, including OSH research work in health institutions.

3.3 Supply qualified literatures for the work unit library of OSH-D easy for anyone to read.

3.4 Increase the quantity and quality of staff in work units in OSH understanding and skills.

3.5 Easiness to access OSH in ISO criteria to anticipate hospital competition in global era.

The programs above can be explained operationally in specific work sheets so they would be guidance to be easily understood. In addition to fixed (regular) work programs, there are incidental programs called consultative programs. They contribute to installing or repairing equipment, materials, and physical facilities as well as answering OSH problems in work units. It is expected that OSH-D has its role to think about supplying equipment and materials for the hospital; These are incidental duties coordinative in nature.

To run operational activities, OSH-D ideally needs substantial funds. Work units are concerned with OSH infrastructures that require more budgets because they must complete and repair them. OSH-D has two sources to finance their operations from the hospital and self-funding through conducting training for outside consumers and “OSH and disaster” accreditation guidance. In the long-term, publishing a journal could be an additional fund source.

The most important themes to socialize

In the first step, OSH-D has tried to empower human resources of the hospital in terms of: (1) general awareness of OSH importance, (2) complying with OSH guidance and standard operating procedures, (3) the ability to take care of the hospital asset especially in maintaining all infrastructures. The empowerment program is done through dialogue and socialization in work units according to established schedules. This is to support the new status of Dr. Sardjito Hospital as “hospital incorporation.” Some important themes to socialize are: (1) the importance of OSH for the company and personnel, (2) awareness of major disasters: fire and explosion, (3) work illness in the hospital. Those relate to the existing work risks in the hospital.

Internal and external cooperation

Because of structural flexibility, three teams under the coordination of OSH-CH have separated from OSH-D. They are Fire and Disaster Controlling Team (FDCT), Disaster Medical Team (MDT), and Nosocomial Infection Team (NIT). These are teams operating basically as it was established at the first time except for FDCT that sustains a cooperative relationship with OSH-D because it is the front-liner of readiness and alertness toward disasters in the hospital.

For external cooperation, OSH-D works together with OSH-related institutions in Yogyakarta city, such as the Fire Department, Search and Rescue (SAR), the Labor Department and Police.

CONCLUSION

The proposal concerning the organization of the Occupational Safety and Health Division is described for major discussions. The reasons and necessary follow-up actions are explained to assist planning and establishing the required activities. Based on the data obtained in the work units in the hospital, it is very important to establish a functioning OSH-D. It is hoped that this can be a valuable input so that we can work together to improve existing weaknesses in implementing OSH activities so as to reach their targets.