

Exploring the Integration of Theory and Practice for OHN Practitioners and Educators in Response to Industry Labor Needs

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Abstract

Occupational Health Nursing is a branch of nursing that focuses on the promotion, protection, and maintenance of worker health in the work environment. In OHN, of course, we will deepen the aspect of occupational health from a homecare perspective. The purpose of this study is to reveal how occupational health and safety theories or lectures taught in homecare courses are used in industrial practice. The method used is qualitative research, phenomenological studies with an exploratory approach, questionnaire questions are submitted to participants: OHN practitioners, OHN course developer lecturers, and practitioners who also develop OHN knowledge as educators as well. Interviews were used via WhatsApp Group to ensure time efficiency and not to disturb the participants' time. The results of the study found the theme of introducing OHN Industry within the scope of nursing students, Adjustment of Field Practice in the Industrial scope, the paradigm of nursing graduates to work in the industrial sector, knowledge of competent nursing OHS HR in the Industrial scope, nurse careers in the field of OHS. The conclusion of this study is that further research needs to be carried out where the theory or lectures at the faculty or cultivation school are actually taught with evidence-based practice so that the OHN knowledge taught can be in accordance with field practice in the industrial environment.

Keywords: Occupational Health Nurse; OHN Practice; OHN Sciences

INTRODUCTION

Surgical workers account for 59% of all health professions in the world (World Health Organization/WHO, 2020). Based on their qualifications from data from the Ministry of Health of the Republic of Indonesia (Kemenkes RI) on January 4, 2023, health workers (nakes) consist of 524,508 nurses (D. F. Albyn, 2024b), 309,838 midwives, and 151,095 general practitioners. Then, 93,652 pharmacists, 49,011 Medical Laboratory Technologists (ATLM), and 47,898 Public Health (Kemas) workers. Furthermore, there are 30,434 nutritionists, 27,918 dentists, and 22,370 Environmental Health (Kesling) workers. From this, it can be concluded that nurses are the human resources (HR) of health workers with the largest number, but is the distribution of HR in Indonesia optimal? Currently, many people assume that after graduating from D3, S1, and the profession of murder, they can only work in clinics, laboratories, or hospitals (ISAFETY, 2024). This idea arises due to the very limited knowledge of colleagues and nursing students about job opportunities for nurses in companies or industries. OHN is an application of concepts and frameworks from various disciplines (nursing, medicine, public health, social and behavioral sciences, and management principles). The

role of OHN itself in general is to improve and maintain the health status of workers, protect workers from work accidents, and risk factors for hazards in the workplace in order to create a healthy and safe work environment. According to OSHA, Occupational Health Nursing (OHN) is an independent nursing discipline whose science is a combination of Medical, Public Health, Industrial Hygiene, and Nursing (Prof. Tan Malaka) and Occupational Health Nursing (OHN) is an independent and autonomous science (Dr. Ambar W. Roestam).

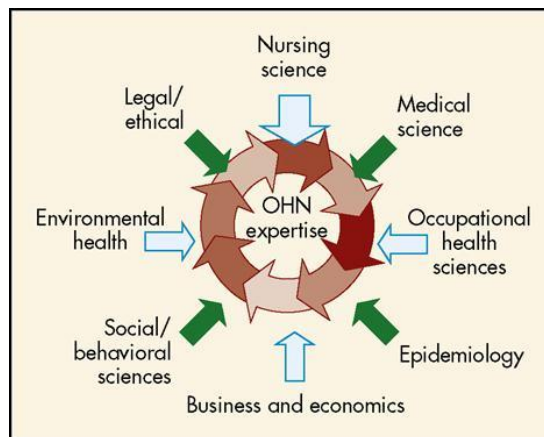


Figure 1 : OHN Key

The profession of OHN and company paramedics can be a breakthrough or optimization of the distribution of nursing human resources in Indonesia. So, this will be able to equalize in various health service sectors. There are many benefits to be gained from working as an OHN such as adequate wages, a varied work environment such as mining, oil and gas, forestry, construction, tourism, and transportation. From the profession of OHN can also be achieved career levels and amounts that vary depending on the institution. For example, hospitals that have Occupational Health and Industrial Hygiene (OHIH) services provide wages ranging from IDR 5 million to IDR 8 million depending on the work location.

In fact, some companies can provide salaries ranging from IDR 10 million to IDR 20 million and obtain facilities for lodging, plane tickets, meals, laundry, and health insurance. In fact, health insurance can also be provided for their families depending on the status and position they hold. Although, from the experience of the author and colleagues of OHN at home and abroad, to obtain these salaries and various facilities, they must be in accordance with the qualifications and competencies required by the company. Various Occupational Safety and Health (K3) professionals have also been employed by companies and industries in 49 countries, including occupational health physicians. Then, occupational health nurses, occupational hygienists, safety engineers, ergonomists/physiotherapists, and psychologists (ILO, 2014).

OHN is a concept and framework from various disciplines, namely nursing, medicine, public health, social and behavioral sciences, and management principles. This concept aims to improve and maintain the health status of workers and protect workers from work accidents and hazards in the workplace (American Association of Occupational Health Nurses/AAOHN) (AAOHN, 2011; Burgel, 2011). This can create a healthy and safe work environment, because one third of Indonesians spend their time at work. In this article, the author, who works as a practitioner and academic, wants to change the paradigm about job opportunities and the welfare of fellow nurses in Indonesia. The number of OHN is still very limited because there are no nursing educational institutions that organize OHN Interest Programs. In addition, OHN teaching staff are not yet available at nursing educational institutions and OHN training in universities (Isak Jurun Hans Tukayoa et al., 2020).

According to the World Health Organization (WHO) in (2012), the various roles of nurses in OHN include medical teams, nursing managers, advisors, educators, and researchers (Hardy et al., 2021). OHN is already known to Western and Developed Countries, but it is still considered a new field in developing countries like Indonesia (Albyn, 2023). To accommodate the OHN profession, the author and team created a digital platform Instagram @ohnurseedu. This has obtained Intellectual Property Rights (IPR) and General Legal Administration (AHU) from the Ministry of Law and Human Rights of the Republic of Indonesia (Kemenkumhan RI). In addition, it is part of the Indonesian Network of Occupational Safety and Health Professionals (INOSHPRO) as a forum for the development of the OHN profession and company paramedics in Indonesia (D. Albyn, 2024).

The conclusion is that OHN and company nursing staff already have practitioners and in this decade, interviews conducted with 3 participants revealed that OHN has a vital role in the company. Unfortunately, OHN science and courses are not yet available in nursing education institutions in Indonesia. Indonesia lags behind other ASEAN countries, in terms of OHN being included in nursing courses and opening up opportunities and paradigms for the scope of nursing profession work (D. Albyn, 2024; D. F. Albyn, 2024a; ISAFETY, 2024). So it can be concluded that currently the "Occupational Health Nurse" course should be included in the "Occupational Health and Patient Safety" course. While waiting for the formation of the Occupational Health Nurse curriculum. Considering that the scope of its knowledge is very small if included in community nursing, it will tend to prioritize health, groups and families, while not all workers in the workplace bring their families into their work environment. Considering that if included in the K3 and Safety course, patients will be more free to discuss Occupational Health and Safety. It's just that with the addition of the Nursing Science aspect, along with the publication of this article, it is hoped that the OHN course will be held in the K3 and Patient Safety course curriculum at Nursing Education institutions in Indonesia as an initial breakthrough in changing the paradigm of nursing graduates only working in FASIANKES (Hospitals, Health Centers, Clinics, and Laboratories) but can work in the Industrial sector supported by the many different industries in Indonesia and Indonesia's goal of becoming a Resilient Industrial Country by 2030 in line with the National K3 Profile in 2024, namely producing competent K3 human resources who are able to have competitiveness in domestic and foreign companies. Quoted from the webinar "Nurse Career in K3" Devaanda Faiqh Albyn regarding the role of Occupational Health Nurses (OHN) in observing and assessing workers' health related to the work they do, as well as hazards and risks in the workplace, She also discussed the various career options available to OHN, including QHSE, HSSE, HSE, OHS, HCM, RESCUE & ER, DAMKAR, OHIH-OHN- Lecturer, Trainer, CEO LSP/PJK3, Ambulance DDT, and Paramedic. This research aims to explore the integration of theory and practice for OHN practitioners and educators in responding to industry labour needs.

METHODS

This study uses qualitative research methods with phenomenological studies, data collection techniques using focus group discussions via WhatsApp Group. The number of participants was three people consisting of OHN Practitioners, Nursing Lecturers, and OHN Practitioners who double as OHN educators. Inclusion criteria are participants have experiences on OHN practices, participants are OHN practitioners and OHN educators. In the process, using assistance through WhatsApp Group so as not to interfere with participants' time and considering the condition of participants who are in remote areas, there are approximately ten questions asked. Based on the results of the discussion from the WhatsApp Group, it can be analysed through coding to identify themes.

RESULTS

The following are the results of interviews from the research, with several participants and themes were found, among others: OHN practitioners do not get OHN courses, only get general occupational health and safety material.

Participant 1:

1. Educational background?
"S1 Nursing, S2 M.Kes (K3 Specialization), S2 M.Kep emergency (on going)"
2. Occupation?
"Nursing lecturer"
3. College category?
"Private college"
4. How long have you been a lecturer?
"5 years"
5. Have you ever taught K3 courses?, explain.
"Yes, K3 In nursing, scope: K3 concept, Patient safety concept, leadership management in patient safety, Universal precaution, K3 program in hospitals, K3 risk potential and hazards in the workplace, K3 risk identification, K3 risk management, Risk control hierarchy, and providing an understanding of the HIRARC method."
6. What courses are OHN or company nurse lectures included in?
"Yes, it is necessary, with OHN courses it can provide understanding for nurses specifically in the industrial field."
7. Have the K3 and OHN practicums been implemented in your place?
"K3 and OHN practicums have not been implemented in industry. However, the RPS includes field visits using risk analysis with the HIRARC method in several agencies, health centers, hospitals, and industries."
8. In your opinion as an academic, is it necessary to create a curriculum or OHN course that is adjusted to Practice in the field? In order to adjust to the needs of the Company/Industry.

“This is a challenge for academics, especially the nursing profession, as the AIPNI curriculum already exists in semester III on the Patient Safety and Occupational Health Safety course, but has not been emphasized regarding nurses in Industry, so it is necessary to consider that:

- a. Companies/industries have a great interest in ensuring the health and safety of their workers. Well-trained OHN can provide effective and sustainable health services, which are in accordance with industry standards and needs.
- b. Well-implemented OHN practices can help prevent illness and injury in the workplace. A curriculum that includes best and innovative practices in managing worker health will produce graduates who can proactively identify and reduce health risks in the work environment.
- c. OHN is not only on the medical aspect, but also involves social and behavioral aspects in managing health in the workplace. Graduates with a curriculum that adapts to field practice will be better able to interact with the work community, promote health, and raise awareness of the importance of safety.
- d. The industry continues to adopt new technologies and the latest methods in health and safety management. A continuously updated curriculum will ensure that graduates are equipped with knowledge of the latest technologies and practices that are relevant to the industry in which they work.
- e. Readiness to face contemporary challenges, changes in regulations, pandemics, and other health challenges requires OHN to be able to adapt quickly. A dynamic curriculum can integrate learning about emergency situations, crisis management, and adaptation to changes in the work environment.”

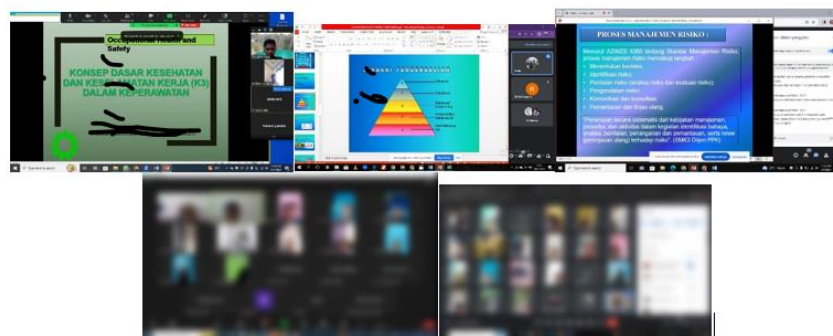


Figure 1 : Documentation of the teaching process for the K3 course

9. Are many of your alumni working in industry?
“specifically in Papua, many of my alumni with bachelor's degree + nurses have worked in industry in Papua”
10. What are your hopes as an academic for the development of OHN courses from D3 to S2?
“The development of OHN courses can improve the paradigm of students who are expected to:
 - a. The OHN curriculum from D3 to S2 can comprehensively integrate theory and practice. This is important so that students not only have a strong understanding of occupational health and safety theory, but also have the practical skills needed to manage and promote health in the work environment.
 - b. OHN is not only about providing health care, but also about case management, health program management, and leadership in dealing with health problems in the workplace. I hope the curriculum can provide a balanced emphasis between clinical and managerial skills so that graduates are able to become leaders in the field of OHN.
 - c. The OHN curriculum to continue to establish connections with industry and field practitioners. I hope there will be active collaboration between universities, companies/industry and health organizations to ensure that the curriculum remains relevant to real needs in the field.
 - d. In the digital era like today, technology plays an important role in workplace health management. I hope the OHN curriculum can integrate the use of the latest technology and innovation to facilitate more effective health information management, data analysis, and interventions.
 - e. OHN must also prepare graduates to face global challenges such as pandemics or rapid changes in the work environment. I hope the curriculum can provide the knowledge and skills needed to respond and overcome these challenges well.
 - f. As an academic, I hope that the development of the OHN curriculum from D3 to S2 can consistently improve the professional quality of its graduates. This includes increasing compliance with ethical standards, implementing evidence-based practices, and developing leadership in the field of occupational health.”

Participant 2 :

1. Educational background?
“D3 nursing, S1 public health (on going)”
2. Occupation?
“OHN practitioner”
3. Company category?
“Oil and Gas, Multinational Company”
4. How long have you been a nurse in the company?
“7 years”
5. Why pursue a career as a nurse in the company?
“Looking for a workplace that provides better benefits, better career opportunities.”
6. List of Jobdesk as OHN?
“Manage occupational health promotion to all employees more than 12,000 workers, health program (health talk, design poster), health surveillance (audiometry, spirometry, respirator fit test), manage wellness program, food handler assessment”
7. Did you get your current Jobdesk when you were studying Nursing?
no
8. If not, how did you learn?
by following internal training from the company and external training from the training service provider
9. In your opinion, is there a college that teaches OHN science that is relevant to your Jobdesk? (Theory and Practice that are in accordance with conditions in the Field)
as far as I know, there are none in Indonesia
10. Your hopes as an OHN practitioner for the development of OHN science in Indonesia?
in every nursing campus, special courses on OHN material and the basics that must be had before starting a career in the industrial world are added, and this will open students' horizons that the field of work for health workers, especially nurses, is not only around hospitals and clinics.
then a special certification is made for prospective OHN in the company industry
11. In your opinion, is it necessary to create an OHN course in Nursing education, starting from D3 to S2?
in my opinion, a special course should be created in college to prepare students and open up broad views, the field of work for nurses is not only around hospitals and clinics.



Figure 2 : Documentation of OHN Practitioner activities

Participant 3 :

1. Educational background?
S1 Nursing, S2 Nursing
2. Job and how long?
OHN Practitioner, 4 years
3. Company Category?
Palm Oil Multinational Company
4. Why pursue a career as a nurse in a company?
More promising and guarantees welfare for nurses and families
5. List of Job Desks as OHN?
“Health surveillance (office syndrome), HIRADC -> health risk assessment, fit for task (MCU (pre-recruitment to retirement) - DCU), manage care (employee and family), Occupational Health Development, Food Hygiene, Emergency Response, emergency disaster, CSR, collaborate with stick

holder, making regulations for health and wellness programs, support ohs monitoring and evaluation in region/sister company”.

6. Did you get your current Jobdesk when you were studying Nursing?
No, there is only an understanding of General K3 material taught by occupational health lecturers who are former company doctors from Chevron and Pertamina offshore.
7. If not, how do you learn?
Attending HIPERKES & AK3U BNSP training, while joining various K3, paramedic and OHN communities
8. In your opinion, are there any universities that teach OHN knowledge that is relevant to your Jobdesk? (Theory and Practice that is in accordance with conditions in the Field)
Not yet, as for community nursing, it does not specifically discuss occupational health and the concept of the course is not in accordance with field practice. There is a statement from one campus that claims that to become an OHN you must take a master's degree and specialist in community nursing and practitioners are encouraged to create nursing care that is not in accordance with the needs of practice in the field. In fact, in practice, even though you have a D3 nursing education, you can become a Paramedic and OHN practitioner supported by various training certifications and work experience.
9. Your hopes as an OHN practitioner for the development of OHN science in Indonesia?
My hopes are simple, that the theories taught in universities can be used and applied in practice in the field. So that students can really understand what they learn according to real practice in the field, and it is also hoped that there will be an OHN practice lab. Like what I did when I taught at several campuses through the Teaching Practitioner Program of the Ministry of Education, Culture, Research and Technology (KEMENDIKBUDRISTEK RI).
10. In your opinion, is it necessary to create an OHN course in Nursing education, starting from D3 to S2?
It is very necessary for the distribution of prospective nurses more optimally, not only piled up in health centers, clinics, and hospitals. In addition, to increase professionalism in terms of both theory and practice of OHN in Indonesia.

From the summary of the answers to the three participants above, the material taught in lectures is very different from field practice, how the statement that OHN must have a specialist education in the Community, but it is not used in the field and the teaching of Occupational Health and Safety courses that not all nursing campuses teach, even as educators not all have the competence to teach occupational health and safety and patient safety courses. So that not all nursing students understand the aspects of occupational health and safety after graduating from college they get an understanding when attending training and seminars outside the campus at their own expense. This is very unfortunate considering the cost of nursing tuition is not a little, especially they do not know that there are career opportunities for nurses to work in Industry/Companies by providing many benefits that can be obtained, while optimizing the distribution of nursing personnel so that they are not always piled up in clinics, laboratories, hospitals, and health centers only. Considering the very large number of nursing human resources and Nursing Campuses, it also needs to be underlined that the aspects of occupational health and safety are very important. Because 1/3 of our day is spent at work, with good implementation of Occupational Health and Safety by Paramedics and OHN, it is hoped that various health problems such as Sexually Transmitted Diseases, Non-Communicable Diseases, Chronic Diseases, Stunting, Anemia, Mental Disorders and others can be minimized, thus supporting the realization of Indonesia's Golden Generation 2045.

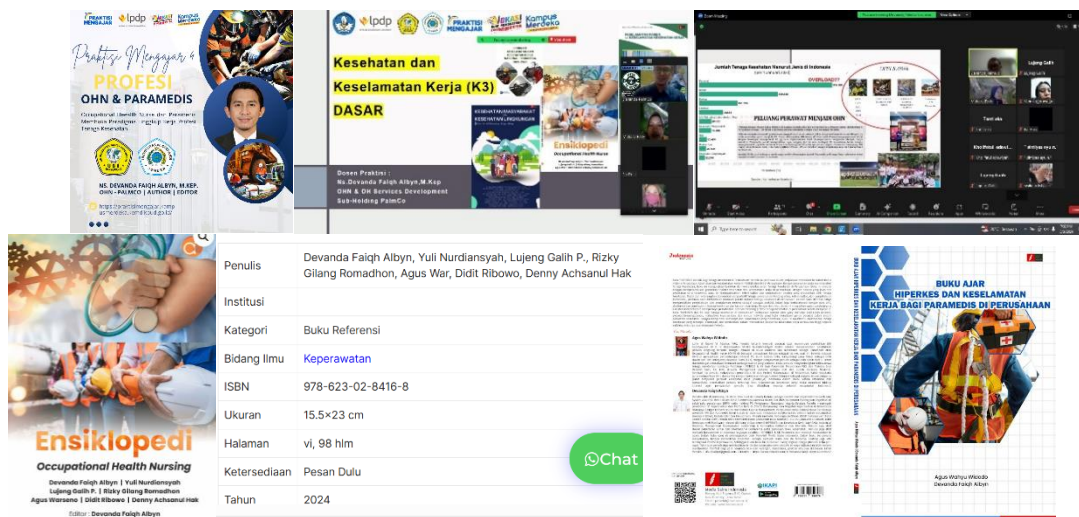


Figure 3 : Efforts of OHN practitioners and nursing lecturers in developing OHN and Paramedical science for Nursing

DISCUSSION

This research found themes from several participants including the introduction of Industrial OHN within the scope of nursing students, Adjustment of Field Practice (PPL) within the scope of Industry / Company, the paradigm of nursing graduates to work in the industrial sector, knowledge of competent nursing OHS HR in the scope of Industry / Company, nurse careers in the field of OHS / hyperhealth nurse / paramedic. So that nursing in Indonesia can be an initial breakthrough for nurse graduates not only working in health facilities (hospitals, health, health centres, clinics, and laboratories), but can work in various industrial sectors in Indonesia and abroad, and increase competent K3 human resources.

In a study conducted by Wahyuni (2022), with a phenomenological study of several nurses in the industry, themes were found including nurses prioritising work accident prevention, identifying work accident risks, and maintaining occupational health and safety among workers in accordance with the stages of work accidents in the Loss Causation Model. In addition, nurses play a role in assessing and finding chronological work accident information from a health perspective. In addition, nurses can also provide recommendations to policy makers in improving the welfare of workers to reduce physical and material losses due to work accidents. According to Menurut (McKeown et al., 2003), also found a dynamic picture of OHN services provided in OHN programmes and their effectiveness regarding knowledge, collaboration, infection risk, and context of OHN services.

Occupational health nurses make up the largest group of occupational health professionals, and are critical to supporting quality health services across a range of sectors including health services, industry and others. According to McCullagh (2012), new strategies need to be developed to prepare nurses to promote a safe and healthy workforce. Occupational health nurses use licensing, continuing education, certification, supervisor and peer assessment of job performance, formal education, and practice to maintain their professional competence and protect public health. Wressell et al. (2018), explained that OHN nurses must be competent in conducting risk management which includes risk mitigation plans, comprehensive risk assessment systems, and risk control, as well as the role of organisational culture and systems in creating a safe workspace. Efforts to increase safety knowledge are also important to understand and make efforts to minimise potential risk hazards that can lead to workplace incidents (Chua & Goh, 2004; Setiyadi et al., 2022).

So occupational safety and health (K3) nurses do not only play a role in the scope of health services, but can be in the industrial or corporate sector. The main role of K3 Nurses or Paramedics must be alert to provide first aid, conduct health checks, health promotion, risk management (Helfi Nolia R. Tambunan et al., 2023). Nurses must also identify potential hazards in the work environment, design a safe work environment, and introduce OHS signs, as well as implement an OHS culture and are required to use complete PPE according to work environment conditions (Rahman et al., 2021). OHN aims to improve and maintain the health status of workers, protect workers from occupational accidents, and hazardous risk factors in the workplace in order to create a healthy and safe working environment (D. F. Albyn, 2024a).

CONCLUSION

This study can be concluded that the Occupational Health Safety course for Nursing is not yet optimal and effective. The campus initiative to register its campus for the Indonesian Ministry of Education, Culture, Research and Technology Teaching Practitioner program is a solution in the development of OHN and Paramedic science where in the program the campus collaborates with practitioners directly, so that students get an idea of how a Paramedic and OHN work in various companies/industries such as: mining, manufacturing, construction, plantations, shipping, transportation - logistics, tourism, oil and gas. It is expected that from this study there will be a follow-up related to the creation of an Optimal Occupational Health Nurse (OHN) curriculum, namely Adjustment of Field Practice, Job Needs, and Materials taught in Nursing Lectures.

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