Institutional Challenges and Opportunities in Integrating Occupational Health Management: A Case Study of Rancaekek District, Indonesia

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Abstract. While occupational health management (OHM) is critical for ensuring worker safety and productivity, its integration into local governance structures remains inconsistent in many developing regions. This qualitative case study examines the institutional challenges and opportunities in implementing OHM policies in the Rancaekek District, Bandung Regency, Indonesia, a rapidly industrializing area with a growing manufacturing sector. Data were collected from interviews with 23 industries and OHM stakeholders—which include policymakers, industry representatives, and workers—as well as from documents of regional regulations on OHM. The findings reveal that the local government has demonstrated commitment to integrating OHM through the establishment of the Regional General Hospital for Occupational Health (RSUD Kesehatan Kerja), although its effectiveness remains hindered by fragmented institutional coordination, limited resources, and varying levels of compliance among small and medium enterprises (SMEs). Key challenges include overlapping responsibilities between local health agencies and labor departments, inadequate training for occupational health inspectors, and a lack of worker awareness of safety procedures, particularly in informal businesses. However, this study has also identified opportunities for improvement, such as partnerships between occupational health hospitals and public and private institutions, digital reporting systems for workplace hazards, and greater involvement of labor unions in policy formulation. Addressing these matters can strengthen OHM frameworks and better protect workers in industrialized regions.

1 Introduction

Over the past five years, the number of workplace accidents in Indonesia has shown an upward trend. This is evident from the increasing number of claims for Work Accident Insurance (*Jaminan Kecelakaan Kerja*/JKK) and Death Insurance (*Jaminan Kematian*/JKM) from 182,835 in 2019 to 360,635 in 2023 [1]. The rise in workplace accidents is predicted to continue since the occupational safety and health (*Keselamatan dan Kesehatan Kerja*/K3) management systems in both the formal and informal sectors remain inadequate [1]. In addition, the proportion of formal and informal workers in Indonesia must be considered. Within a total workforce of about 149 million people in 2024, the number of informal workers in Indonesia is higher (59.17%) than that of formal workers (40.83%) [2]. Data on workplace accidents recorded through JKK and JKM claims are likely to come from the formal economic sector, raising the possibility that the incidence of workplace accidents in the informal sector is even higher [2,3]. Furthermore, 52.94% of all informal workers are in rural areas, which typically have lower access to K3 information or facilities [2]. Studies on K3 in

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the informal sector indicate that informal workers are unable to identify work risks and have limited knowledge of handling workplace accidents [3].

While being an economic driver due to more adequate infrastructure [4], the development of Industrial Estate (*Kawasan Industri*/KI) throughout Indonesia is also believed to be responsible for the increasing trend of workplace accidents. Currently, there are 107 Industrial Estates and 20 Special Economic Zones in Indonesia, particularly on the island of Java [4]. One of the most well-known and oldest ones is the Rancaekek Industrial Area in West Java.

This study focuses on the governance of occupational health in the Rancaekek Industrial Area. Rancaekek and the surrounding Majalaya area are known as the oldest textile industry center in Indonesia. Some refer to this area as the "dollar city" since export earnings from the fabric production are paid in dollars, improving the community welfare [5]. Adopting an anthropological perspective, this study examines the challenges facing occupational health management actors in Rancaekek in realizing integrated occupational health governance. In addition, this study aims to identify opportunities for improvement in the development of occupational health management by social institutions. Previous studies have reported how the anthropological approach can contribute to restructuring health governance and offer new perspectives in the study of occupational health, particularly through its more grounded approach and focus on norms, values, and community culture.

The connection between culture and occupational health has been well-documented, highlighting the significant role of sociocultural factors in health service utilization. Evidence suggests that clear health insurance mechanisms can heighten public health awareness [6]. Furthermore, cultural diversity often requires centralized health policies to guarantee effective access for all. This is illustrated in contexts like Indonesia, where a system of pluri-practice allows formal and informal health services to coexist and mutually support each other through training and capacity building. These dynamics demonstrate that culture and religion exert a considerable influence on occupational safety and health (K3) behavior. For instance, religious practices have been shown to positively correlate with greater compliance with K3 protocols [7]. Additional factors, such as marital status and the intensity of K3 training, also build workers' safety awareness [8]. Therefore, effective K3 approaches must integrate both sociocultural and religious factors.

Within health governance, community involvement is critical for enhancing service effectiveness. Recommendations include fostering relationships between hospitals and local informal leaders to overcome sociocultural barriers. This approach is consistent with strategies for building community trust, which advocate for collaboration with local organizations and public health campaigns. The positive correlation between Social, Cultural, and Community Engagement (SCCE) and improvements in preventive health underscores the value of community-based initiatives [9]. There is also growing recognition of the need to integrate cultural sensitivity into health policy. This involves hospitals adopting culturally sensitive practices alongside the promotion of national values and providing cultural awareness training for health workers to enhance patient understanding [10]. As such, hospitals are being urged to develop formal community-engagement guidelines in support of these measures [11]. A holistic approach that weaves together cultural aspects, centralized policies, and active community participation is therefore essential for improving health service quality. In this study, the anthropological perspectives of policy, culture, and community participation are framed as opportunities to evaluate occupational health management in Rancaekek.

2 Methods

This qualitative study employed an ethnographic approach [12]. Data were collected from 23 industries and OHM stakeholders in the Rancaekek area, covering the Regional General Hospital for Occupational Health, local village authorities, Health, Safety, and Environment (HSE) departments in various companies, and owners of informal businesses around Rancaekek. This study was conducted over a period of four months, from September 2023 to January 2024, as part of the Sociocultural Study for the Master Plan of the Development of the West Java Regional General Hospital for Occupational Health.

3 Results and Discussion

3.1 Rancaekek District as Industrial Area

Rancaekek is a sub-district located in the eastern part of Bandung Regency, adjacent to the Sumedang Regency. Both locations serve as transportation routes from Bandung and Garut heading toward the southeastern region [13]. Rancaekek consists mostly of rice fields, which is why it is often nicknamed the rice barn region. In addition, it has vast agricultural land that residents can use for farming to meet their daily needs.

Fig. 1. Map of Rancaekek District in West Java, Indonesia

The late 1970s marked the beginning of the textile industry around Rancaekek and Sumedang Regency. The first and largest industrial area covered approximately 10 hectares and began operation in 1980. The construction was part of the industrialization that was heavily promoted and prioritized during the New Order era as an attempt to improve Indonesia's economic situation. Practically every nation has come to believe that industrialization is essential and a prerequisite for progress to achieve the goal of improving the living standard. Industrialization can ensure the sustainability of a high and continuous economic development process, increasing per capita income each year [14].

The Rancaekek Industrial Area established its two oldest textile industries, PT Vonex Indonesia and PT Kewalram, in 1976 and 1978, respectively. Both were quite advanced from the very beginning. In fact, many residents have taken advantage of the employment

opportunities provided [15]. PT Vonex Indonesia was the only textile industry located within the Rancaekek District, as most of the other nearby industries were situated within the Sumedang Regency.

In 1986, the second largest textile industrial area—spanning up to 35 hectares—was established near Rancaekek. It remains the largest textile industry in the area to date. Although these industries are administratively located in Sumedang Regency, their impact is also significantly felt by surrounding communities, including the residents of Rancaekek. Since the establishment of the textile industry, changes have occurred in the Rancaekek community, affecting its social, cultural, economic, and environmental aspects. While they are natural and continuous, not all changes necessarily lead to positive outcomes.

Essentially, development is a form of social change that is anticipated in both the roles and elements of the development process itself as well as in the lives of the people involved. Development can be considered successful if it raises the people's standard of living and empowers them to become more self-reliant. The development of industries around Rancaekek took place between 1979 and 1988. Social transformation in the Rancaekek community began in 1980, marked by an increase in the number of migrants from various regions [14]. This implies that social change in the Rancaekek community occurred simultaneously with the development of the textile industry in the surrounding areas. The three largest textile industries—PT Five Star Tekstil Indonesia Ltd., PT Kahatex, and PT Insan Sandang Internusa—have each employed over 500 workers since their establishment in 1979, 1986, and 1988, respectively [15].

Industrialization has made Rancaekek District a bustling center of activity. Every aspect of community life in this area has been impacted in various ways by the growth of surrounding industries, which are administratively located within the Sumedang Regency. Industrialization has played a significant role in its economy, as evidenced by increased urbanization, which is closely linked to job opportunities and economic growth. Socially, industrialization has changed the character of the community, from a predominantly rural society to an urban one. This development has also affected the natural environment, causing various problems that the community must address.

3.2 Rancaekek Occupational Health Hospital as Central Actors

In response to the need for occupational health services, the West Java Provincial Government inaugurated the Occupational Health Hospital (*Rumah Sakit Kesehatan Kerja*/RSKK) in 2009, evolving from an institution called the Community Occupational Health Center (*Balai Kesehatan Kerja Masyarakat*/BKKM), which had existed since 1999. Initially, BKKM was established in 1999 in four industrial areas in West Java—Bandung (Rancaekek), Bekasi, Bogor, and Tangerang—to serve as an occupational health facility for the community.

In Rancaekek, RSKK serves as a reference center for work-related accidents in both formal and informal sectors. In several cases, this special hospital even handles patients from outside the regency in West Java. The admission of patients with work accidents to RSKK is mostly processed directly by the employer (either the HR department or the owner of an informal business). As such, there is generally no integrated governance system involving various actors in occupational health in Rancaekek. Each actor addresses occupational health issues independently within their respective sectors; large industrial companies usually have their own internal OHM system, namely the Occupational Safety and Health Advisory Committee (*Panitia Pembina Keselamatan dan Kesehatan Kerja*/P2K3), while small businesses and the informal sector typically seek help from local administrative authorities in the event of a workplace accident. Currently, the OHM authorities in each economic sector fulfill their OHM functions rather reactively, lacking preventive measures such as the absence of medical experts in P2K3 and K3 education in the informal sector. Meanwhile,

parties such as RSKK or regional Labor Inspectors from the Ministry of Manpower of Indonesia have the potential to play a role in achieving OHM integration between parties, a crucial measure that can address the challenges facing both formal and informal economic sectors. The following section describes the challenges faced by stakeholders in the context of occupational health.

3.3 Challenges in Integrating Occupational Health Management in Rancaekek

In this section, the discussion of existing challenges is presented based on the main stakeholders around the Rancaekek Industrial Area, namely: a) village administrators; b) business owners; and c) relevant government officials, such as the Health Office and Labor Inspectors. As those having the legal authority within their respective leadership, whether at the small-scale level (such as MSMEs) or at the provincial level, these parties are believed to play a vital role in integrating occupational health management in Rancaekek.

Table 1. Challenges in Integrating Health Management in Rancaekek

Occupational Health Governance Challenges	Findings
Obstacles Faced by Village Institutions	
The procedure for handling BPJS is considered unclear, especially in cases of occupational health.	According to several village officials, procedures related to BPJS, especially BPJS TK for Non-Wage Recipients (*Bukan Penerima Upah*/BPU), remain unclear. This includes submissions by the village authorities, data collection, and claims to the hospital. Regarding data collection, it is particularly difficult for the village authorities to determine who is a BPU recipient and who is not, as informal jobs are dynamic and people frequently move from one job to another.
It is difficult to encourage citizens to have and make use of BPJS TK for non-wage recipients (BPU).	The common issue found in all observed village/sub-district offices is the informal workers' lack of awareness of the importance of having health insurance. A village secretary mentioned, "Let alone dealing with BPJS, just finding work is already difficult." This reflects that BPJS is indeed not yet a primary concern. One of the villages in Sumedang Regency, namely Sendangpakuon Village, is making efforts to provide incentives for BPJS BPU premium payments. However, due to inaccurate data collection of informal sector workers, some unemployed individuals still have their premiums covered.
Coordination between sectors is not conducted intensively.	Most of the village authorities admit that, in terms of employment, their relationships with other parties are lacking or have not been established at all. A close coordination exists with the P2K3 teams from various companies, especially when many village residents work for those companies. However, the established relationship is incident-based, meaning that when a workplace accident occurs, the company contacts the village authorities to coordinate the handling of the accident.
Obstacles Faced in the Workplace	
(In large companies) It is difficult to determine	Since health/medical aspects are specialized fields, companies typically do not have in-depth knowledge of how to handle workplace accidents, particularly those of biological or chemical

medical criteria in cases of occupational health.	hazards. Consequently, workplace accident tends to be handled based on the chronology. Companies consider this ineffective as it only looks at the chronological aspect, thus only covering the tangible aspects of the accident. Meanwhile, other intangible aspects exist, such as poisoning, fatigue, psychological effects, and many others. Some aspects are difficult to identify through K3 knowledge, such as cases of factory workers in Garut being possessed.
(In large companies) The existing K3 infrastructure is not effective.	Similar to the medical criteria, the infrastructure built also follows this chronological mindset. For example, the presence of the evenly distributed first aid kits shows the company's responsiveness in handling physical (tangible) workplace accidents. Meanwhile, the first aid kit may ultimately be irrelevant to the workplace accident that occurs.
(In large companies) The existing K3 programs from the government do not have gender mainstreaming.	The factory management is already aware of the fact that the treatment of male and female workers differs, especially in terms of work patterns. Several companies (e.g., PT. Yakjin) have implemented special programs to improve work effectiveness for women. However, the findings indicate that there is currently no specific and implementable policy regarding gender mainstreaming in the informal labor sector.
(In small companies) Knowledge of BPJS facilities remains very limited.	In large companies, the process of claiming BPJS related to work accidents begins with a chronological analysis, as previously mentioned. This is followed by consultation with the labor inspector and coordination with the village authorities. Patient admissions to the hospital can only be processed after all these procedures. This lengthy process can be reduced and simplified, especially when the case at hand is urgent. As for small companies, specifically MSMEs, there is no obligatory rule requiring them to provide health insurance for their employees. Yet, their work rate is very high.
Obstacles Faced by the Relevant Agency	
Occupational health monitoring that occurs in large companies is often not comprehensive/holistic.	Relevant agencies, especially the labor analysts at the Health Office or the Occupational Safety Supervisory Unit (*UPT Pengawas Ketenagakerjaan*) from the Provincial Labor Office (*Disnaker Provinsi*), complain that companies structure their K3 management to focus solely on accidents (accident-centric), rather than taking a comprehensive approach starting from the recruitment stage. If arranged holistically, K3 management can begin with employee recruitment to determine the baseline, as well as the tendency for workplace accidents based on those employees.
In reporting their condition (especially in the field of labor inspection), companies are often uncommunicative.	The relevant authorities realize that, to protect their image, many companies are not open about their K3 management. In fact, transparency is a positive point for those companies. Due to this lack of transparency, K3 implementation in these companies often goes unmonitored and is merely normative.
Coordination between institutions often overlaps.	Regarding occupational health, many positions/titles with similar nomenclature and responsibilities exist in different departments. This is considered an attempt to avoid cooperation between those departments.

3.4 Opportunities in Integrating Occupational Health Management in Rancaekek

There are at least four aspects that can be considered as opportunities for the development of occupational health management: a) the condition of the Rancaekek community; b) institutional relationships that RSKK can develop; c) governance changes in the formal economic sector; and d) governance changes in the informal economic sector. Based on our assessment within the context of institutional frameworks, these four aspects are feasible to implement and are in accordance with the authority of each institution.

Table 2. Opportunities in Integrating Occupational Health Management

No	Aspects	Findings	Opportunities
1	The Condition of the Rancaekek Community	While being part of the workforce, the Rancaekek community has limited knowledge of occupational health.	RSKK can serve as the party that provides outreach about the importance of occupational health, as well as the promotion of general occupational health that aligns with the norms and values of the local community.
2	Institutional Relations of RSKK	The Rancaekek community is not fully aware of the existence and unique characteristics of RSKK; people view RSKK the same as any other healthcare facility.	RSKK can become a progressive institution, with public relations programs such as community outreach or participation in informal activities within the local community to strengthen its presence.
3	Occupational Health in the Formal Sector	Formal economic sectors, such as factories, have their own occupational health management (P2K3). However, its staff sometimes remains unaware of workplace accidents due to limited medical knowledge.	RSKK can diversify its healthcare services by obtaining certification as an occupational health service provider (*Perusahaan Jasa Keselamatan dan Kesehatan Kerja*/PJK3), either by acting as an occupational health auditor or as a training service provider in formal companies.
4	Occupational Health in the Informal Sector	The informal economic sector generally does not prioritize the occupational health of its workers, and work relationships are sometimes not established through clear contracts. Likewise, the handling of workplace accidents is usually haphazard.	The community is already accustomed to having community health centers (*Pusat Kesehatan Masyarakat*/Puskesmas) in their vicinity; opportunities related to occupational health in the informal sector can be achieved in the same way, namely by re-establishing community occupational health posts (*Pos Upaya Kesehatan Kerja*/Pos UKK).

4 Conclusion

Anthropology can offer new insight into how occupational health management should work. While epidemiology can describe priorities, anthropology can define possibilities for action on population health [12]. This study proposes three potentials for the enhancement of occupational health management. First, the presence of an occupational health hospital in Rancaekek is highly beneficial for the area. The next step to consider is to determine how this hospital can participate in informal community activities and bring about changes in community norms and values in accordance with existing policies. Second, to build more

intensive relationships with the formal economic sector, the occupational health hospital in Rancaekek can serve as an occupational health service provider (PJK3) that can formally cooperate with companies. Finally, it is strongly recommended to reactivate the community occupational health post (Pos UKK) as a closer unit to reaching the community and to institutionally integrate Pos UKK with RSKK.

Nevertheless, several challenges listed previously have been excluded from the analysis of opportunities due to the limited scope of this study. Therefore, further studies are essential to examine the aspects of authority and policy in studying the integration of occupational health governance within an industrial area.

References

1. Social Security Agency for Employment. *Work Accidents Have Increased Significantly in the Last Five* Years *(In Indonesian)* https://www.bpjsketenagakerjaan.go.id/berita/28681/Kecelakaan-Kerja-Makin-Marak-dalam-Lima-Tahun-Terakhir (2024).
2. Central Bureau of Statistics. *The February 2024 National Labor Force Survey Booklet (In Indonesian)*. (Jakarta, 2024).
3. Sway, G. G. & Materu, S. F. Status of occupational health and safety in the informal sectors in Tanzania: the case of stone quarrying and soil brickmaking. *International Journal of Occupational Safety and Ergonomics* **30**, 136–145 (2024).
4. Danareksa. *Development of Industrial Estates in Indonesia (In Indonesian).* (2023).
5. Yogatama, B. K. & Mediana. Fading Glory of the 'Dollar City' (In Indonesian). *Kompas.id* https://www.kompas.id/artikel/pudarnya-kejayaan-kota-dollar (2023).
6. Puri, R. & Sun, C. Increasing utilization of public health insurance programs: Evidence from an experiment in India. *World Dev* **139**, 105321 (2021).
7. Amin, M. R., Kim, I. & Lee, S. Local religiosity, workplace safety, and firm value. *Journal of Corporate Finance* **70**, 102093 (2021).
8. Ahadzi, D. F., Afitiri, A.-R. & Ahadzi, E. Organizational safety culture perceptions of healthcare workers in Ghana: A cross-sectional interview study. *Int J Nurs Stud Adv* **3**, 100020 (2021).
9. Gao, Q. *et al.* Associations of Social, Cultural, and Community Engagement With Health Care Utilization in the US Health and Retirement Study. *JAMA Netw Open* **6**, e236636 (2023).
10. Jones, M. *et al.* Working Towards Culturally Safe and Sensitive Hospital Social Work Practice in Northern Adelaide, South Australia. *J Racial Ethn Health Disparities* (2025) doi:10.1007/s40615-025-02543-1.
11. Stubbe, D. E. Practicing Cultural Competence and Cultural Humility in the Care of Diverse Patients. *Focus (Am Psychiatr Publ)* **18**, 49–51 (2020).
12. Stellmach, D., Beshar, I., Bedford, J., du Cros, P. & Stringer, B. Anthropology in public health emergencies: *what is anthropology good for? BMJ Glob Health* **3**, e000534 (2018).
13. Larista, S., Agista, R. A. & Putra, D. A. D. Feasibility Analysis of Namicalung Village to Become Majalaya's Legendary Sarong Weaving Tourism Village. *Jurnal Syntax Transformation* **5**, 193–206 (2024).
14. Pudjaningrum, E. S. & Athoillah, Moh. Determinants of Labor Absorption in the Industrial Sector: Panel Data Analysis in West Java Province (In Indonesian). *Jurnal Dinamika Ekonomi Pembangunan* **8**, 1–18 (2025).
15. Fitriani, S., Mahzuni, D. & Septiani, A. Social Change in Rancaekek Society, 1980–2015 (In Indonesian). *Metahumaniora* **8**, 39–57 (2018).