

Unearthing Risks: Assessing the Occupational Safety and Health Conditions of Baguio Cemetery Workers

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Abstract

This study explores the occupational safety and health (OSH) conditions of Baguio City cemetery workers by examining their work-related injuries, OSH awareness, and perceived OSH conditions. Using an exploratory research design, the study employed a structured questionnaire and interviews, with Republic Act (RA) 11058 and Joint Memorandum Circular (JMC) No. 1, s. 2020 serving as proxy indicators to assess OSH conditions, as the cemetery workers are not formally covered by these policies. Results showed that workers experienced various injuries in different body parts from various causes and accidents. They were only partially aware of existing OSH programs and perceived the cemetery's OSH conditions as poor. A moderate and significant relationship was found between workers' awareness of OSH standards and their perception of OSH conditions. The findings suggest the need to strengthen OSH awareness and implement measures to address deficiencies in informal work settings to promote the safety and well-being of cemetery workers.

Keywords: occupational safety and health, cemetery workers, informal sector

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Introduction

Occupational Safety and Health (OSH) Mandate

The International Labour Organization (ILO) (1998) defines OSH as a “discipline dealing with the prevention of work-related injuries and diseases as well as the protection and promotion of workers’ health. It aims at the improvement of working conditions and environment” (p.22). Additionally, OSH is concerned with “protecting the safety, health, and welfare of people engaged in work or in employment” (Micheli et al., 2018).

OSH acknowledges and serves as a commitment to solving realities in the workplace. ILO argues that in 2018, work-related injuries and diseases accounted for 2.4 million of the 2.78 million work-related deaths reported each year. Apart from the tremendous agony inflicted upon workers and their families, the financial consequences are enormous for the economy, government, and the global community. Roughly 3.94% of the global GDP is lost each year due to losses in compensation, missed workdays, disrupted production, training, and medical expenses (ILO, 2019).

Adhering to the commitment to guarantee workers’ protection and safety and enforce OSH, various statutes and policies have been enacted in the Philippines. Article 162 of the Labor Code of the Philippines prescribed that:

The Secretary of Labor and Employment shall, by appropriate orders, set and enforce mandatory occupational safety and health standards to eliminate or reduce OSH hazards in all workplaces and institute new, and update existing, programs to ensure safe and healthful working conditions in all places of employment.

Executive Order (EO) 307 of 1987 created the Occupational Safety and Health Center. Thirty years later, the enactment of RA 11058 and its Implementing Rules and Regulations (IRR) was stipulated through the DOLE (Department of Labor and Employment) Department Order (DO) 198 of 2018.²

² “An Act Strengthening Compliance with Occupational Safety and Health Standards and Providing Penalties for Violations Thereof”

Amidst the policies prescribed by the state governing OSH, improving standards and conditions have been challenging in the Philippines and abroad. Various working groups and sectors remain particularly vulnerable to work-related injuries and occupational hazards. Predominantly, workers in the informal sector face greater risks due to the nature of their work, emphasizing the need for comprehensive strategies to extend OSH measures to all sectors of the workforce.

Informal Sector & Occupational Hazards and Risks

The ILO (2004) defines the informal sector as one that “consists of independent, self-employed small-scale producers and distributors of goods and services.” The informal sector is characterized by the International Conference of Labour Statisticians (ICLS) (2003):

... tend to have little or no access to organized markets, to credit institutions, to formal education and training institutions, or to many public services and amenities; they are not recognized, supported or regulated by the government; they are often compelled to operate outside the framework of the law, and even where they are registered and respect certain aspects of the law they are almost invariably beyond the pale of social protection, labor legislation and protective measures at the workplace.

From the ICLS definition, one characteristic of the informal sector is being barred from the influence of government institutions and organized markets. This makes the informal sector “highly vulnerable” because of its lack of access to social protection like health benefits, insurance, and a decent working environment (Gavilan, 2017). Most of the activities within this sector are conducted without proper government permits and most elude the attention of the administrative machinery (Tolentino et al., 2001). Hence, informing and enforcing OSH standards on informal sector workers has been a consistent challenge for authorities. Various sources and literature indicate that there is a lack of knowledge, low awareness and stubbornness in complying with OSH and other related policies (Arante, 2011; Hummel, 2017; ILO, 2018; Lu, 2011; Padmavathi & Aruna, 2022).

Another set of challenges the informal sector is facing is the hazards, risks and potential harm at work. On the one hand, a hazard is any source

of potential damage, harm, or adverse health effects on something or someone under certain conditions at work (HSS Philippines, 2023). Hazards can be physical, chemical, biological, ergonomic, or psychosocial (Concepcion, 2015; Health and Safety Executive, n.d.). On the other hand, risks involve both the probability of an event occurring and the severity of the potential harm if it does occur (HSS Philippines, 2023).

In relation to the potential harm of the negative health effects or injuries that could result from exposure to a hazard. This includes both immediate and long-term health effects, ranging from minor injuries like cuts or bruises, to serious conditions, such as chronic respiratory problems or cancer (HSS Philippines, 2023; National Institute for Occupational Safety and Health, 2021).

These risks are evident as Lu (2011, 2021) showed the prevalence of OSH vulnerability among construction workers and sanitation-related jobs in the Philippines, which have been classified by the DOLE's (2018) Bureau of Working Conditions under "high risk" jobs. Lu provided that construction laborers and sanitation workers are exposed to hazards such as work-related injuries, poor working conditions, lack of hygiene, and various ergonomic and chemical hazards, which are common cases in several developing countries (Andalib et al., 2011; Ko Ko, 2020; Batool et al., 2015; Cunningham et al., 2012; Ko, 2020; Loewenson, 1998).

Similar to the Philippines, Ahmed et al. (2019) argued that even though Nepal and Bangladesh have building codes and construction safety regulations, construction workers typically aren't aware of them or do not follow them. In Kelantan, Malaysia, OSH regulations in small-scale to medium construction firms have the lowest level of awareness, which accounts for 2.9% of their respondents (Kamar et al., 2014).

Fauzania et al. (2018) indicated that not all construction workers in Bandung, Indonesia understand the importance of OSH. Their study further elaborated that the high rate of workplace accidents in Indonesia shows workers' lack of understanding of OSH. Eyiah et al. (2019) suggested that in Ghana's construction industry, the existing OSH "legal and regulatory framework is barely adequate." Although workers are aware of the regulations, they could not identify the exact laws and their relevant elements.

Xia et al. (2020) also recognized psychological conditions as among the antecedents of safety behavior in construction. One of their key findings indicated that unsafe behavior in construction sites was due to the workers' cognitive failures, which occur in the five processes of obtaining information, understanding information, perceiving responses, selecting a response, and taking action. In addition, Afroh and Basaria (2023) suggested the further development of hazard identification, risk assessment, and risk control (HIRAC) among construction companies to reduce work-related accidents and protect workers' health and the environment.

Worth noting is Lee and Di Ruggiero's (2022) argument that informality "does not necessarily lead to poorer health outcomes than formal employment." However, it is important to note that informal workers do have essential weaknesses, including exposure to a hazardous working environment and restricted access to social protection and health services; the associated health implications differ depending on the worker subgroup (e.g., gender and country).

Thus, authorities must instill awareness and inform workers on OSH, especially the informal workers and particularly those involved in construction and sanitation works, to avoid or minimize work-related injuries and accidents. It is important since studies such as Arante (2011) uphold that the level of safety awareness is strongly associated with the level of safety compliance. Additionally, Fung et al. (2016) contended that workers' health and safety awareness is positively related to compliance with OSH policies. Hu et al. (1998) showed that awareness of OSH in small-scale industries is warranted to enhance compliance with OSH. Uzuntarla et al. (2020) found a significant positive correlation between safety awareness and safety behaviors. They concluded that the increase in safety awareness led to increased safety behavior. Notably, Asuncion (2018) revealed a high incidence of work-related injuries, accidents, and diseases attributed to low awareness of and compliance with OSH.

Cemetery Workers

This study focuses on the cemetery workers in Baguio City, Philippines. Cemetery workers should be covered with OSH standards since Section 2 of DOLE DO No. 198, s. 2018 directs that OSH policies "shall apply to

all establishments, projects and sites, and all other places where work is being undertaken in all branches of economic activity.” Cemetery workers undertake work and do economic activities and are thus under the said policy. Notably, the cemetery workers studied in this research are not bonded as Job Orders, Contract of Service, or employed by a private third-party service provider. They are independent, self-employed individuals or small-scale groups who wait for work opportunities within the cemetery. Despite their informal employment status, they are still considered workers who engage in economic activity and are, therefore, covered by OSH standards. However, amidst their inclusion within the scope of OSH legislation, as members of the informal sector, cemetery workers are not formally covered by the said law and thus, have a higher risk of possible work-related accidents” (Dizon, 2023, p.4).

In relation, cemetery work is similar to that of other informal sector groups, such as those in the construction and sanitary industries. Cemetery work is construction-related since the work involves digging, construction of structures such as tombs, mausoleums, columbarium, stonework, and landscaping. It is also sanitation-related because it involves the proper disposal of the dead. Cemeteries are technically governed by construction-related policies such as the National Building Code and Housing and Land Use Regulatory Board (HLURB) resolutions,³ zoning ordinances,⁴ and sanitation policies, specifically the Sanitation Code of the Philippines⁵ (Dizon, 2023).

Related studies indicate the exposure and risks of cemetery workers, as part of the informal sector, to work-related accidents and occupational hazards. The study of Pinheiro et al. (2012) on ergonomics and occupational health sciences in São Paulo, Brazil showed severe problems experienced by the gravedigger, which are associated with physical and mental demands and social devaluation. Their study also noted that the absence of personal protective equipment (PPE), and the workers’ vulnerability to injuries and exposure to contaminated materials during inhumation and exhumation activities.

3 HLURB Board Res. No. 681 of 2000 (Guidelines on projects in the cemetery) & HLURB Board Res. No.797 of 2007 Section B-1 Rule II, 4-B (Minimum Design Standards)

4 Republic Act No. 7160 (Local Government Code of 1991) Sections 17 (b-2-x) and 20

5 RR of Presidential Decree No. 856, Chapter XXI (Disposal of Dead Persons)

According to Alishaq et al. (2021), cemetery workers are at high risk of exposure to contagious diseases due to their contact with infected deceased bodies. Their study suggested that a substantial proportion of Qatari mortuary and cemetery workers had evidence of COVID infection, which was validated through nasopharyngeal swabs for RT-PCR and serologic testing.

Colombo et al. (2019) also stated that cemetery workers are exposed to psychosocial risks. According to Cox and Griffiths (1995), psychosocial risk involves social and emotional aspects that can affect working life and the perception of safety in the workplace. Cemetery workers are linked to psychosocial risk because they come into contact with the experience of death and the emotions associated with it.

Lapatha et al. (2019) studied the social well-being of families living in cemeteries in Cebu City, Philippines. The study implied that the families working in the cemetery are socially well based on Keyes' Social Well-being Theory. However, the study also showed that families encountered imminent threats that could endanger their well-being such as security, health, finances, shelter, and interpersonal relations. Although the study focused more on the social well-being of families living in cemeteries, it was evident that families also encountered the issues and challenges of workers in the informal economy, including OSH.

Literature on OSH and the informal sector is flourishing and has caught the interest of researchers; however, there is an absence of studies looking directly into OSH among cemetery workers. Moreover, there has been a dearth of studies focusing on cemeteries as a sector, discipline, and their workers (Hussein & Rugg, 2003; Kjølner, 2011; Zavattaro, 2021). Hence, this study addresses this gap by studying the welfare of cemetery workers in Baguio City, in particular, their health and safety concerns at work.

Research Objective

Generally, this research aims to determine the awareness and perceived conditions of OSH among Baguio City cemetery workers. It focuses on work-related injuries and OSH concerns and issues. The following are the research problems:

1. What are the work-related injuries experienced by the Baguio City cemetery workers in terms of:
 - type of injury;
 - injured body part; and
 - cause of injury?
2. What is the level of awareness on OSH programs among Baguio City cemetery workers?
3. What is the level of perceived conditions of the Baguio City cemetery workers regarding OSH standards?
4. What is the relationship between the level of awareness of OSH standards among Baguio City cemetery workers and their level of perceived conditions on OSH standards?

Methodology

Method and Design

The study employed a mixed-method design, specifically an exploratory research design. Initially, a quantitative study through a descriptive-correlational design was utilized. The data collected was thoroughly analyzed and complemented with a qualitative tool.

The qualitative tool used was the descriptive method, which involved conducting in-depth interviews with a select group of cemetery workers and government representatives who manage the cemetery. These interviews aimed to gather detailed insights and contextualize the quantitative findings.

Locale and Population

This study was done in the Baguio City Public Cemetery—also known as Baguio City Cemetery. Baguio was selected since the city is one of the 33 highly urbanized cities in the Philippines (PSA, 2024). As an urban settlement and modern city, both urbanization and modernization pose an increase in members in the informal sectors (Organization for Economic Cooperation and Development, 2002).

The primary respondents are the Baguio City cemetery workers. The respondents were easily identified since they normally wait for clients

in front of the Baguio City Cemetery Office, and on the main road and alleys inside the Cemetery. They can also be confirmed through referrals of the cemetery caretaker, as well as through the researcher's personal acquaintance with some of them.

Purposive sampling and snowball techniques were employed in choosing the respondents since the workers' actual population size was undocumented. Through data collection and referrals by other respondents, the researcher met 33 workers and all agreed to partake in the study. Interviews were also facilitated with four government workers managing the Baguio City cemetery belonging to the city government's City Environment and Parks Management Office (CEPMO). Their designations and assignments were: Public Service Officer IV (Parks Management), Public Service Officer III (Parks Management), Public Service Assistant Officer (City Cemetery Caretaker), and Foreman II (City Cemetery). To ensure privacy and confidentiality, with the exception and approval of the City Cemetery Caretaker, the identities of respondents and informants are not disclosed.

Data Gathering Procedure

During the initial data collection phase, one of the main limitations of the study was the lack of formal OSH training among the respondents. It was established that the majority of these workers had not undergone the DOLE-designed or prescribed Basic Occupational Safety and Health, Construction Safety and Health, or HIRAC training. To address this limitation, the researcher clearly explained OSH concepts and questions in layman's terms. This was to ensure that the respondents could provide informed answers reflective of their on-the-ground knowledge and practices, despite not having received formal training. By doing so, the researcher aimed to capture a realistic picture of OSH awareness and conditions from the workers' perspectives.

To formally contact the respondents, a letter was sent requesting to conduct data gathering within the cemetery. This was addressed to the City Cemetery Caretaker and Public Service Assistant Officer, Mr. Antonio S. Ocampo of CEPMO. To interview CEPMO officials who manage the Baguio City Cemetery, a letter was addressed to Atty. Rhenan G. Diwas, CEPMO Department Head. The request was granted and recommended to the necessary officials.

Following approval of both letters, the researcher assisted the respondents in answering the questionnaire. Before the actual data collection, informed consent was obtained from all participants, providing clear information about the purpose of the study, their involvement, and their right to withdraw at any time. It was also explained that their responses would remain confidential and anonymous.

Data Gathering Instrument

A questionnaire was used as the data-gathering instrument. It was comprised of three parts. The first part is a checklist on work-related injuries. The categories of the types and causes of injuries were based on the data organization collated by Lu's (2021) study.⁶ The data were also based on the PSA (2019) data on Safety and Health in the Workplace.

The second part determined the selected standards of the OSH Program for medium to high-risk establishments as prescribed under Section 12(b) of the IRR of RA 11058, also known as DO 198.⁷ These selected provisions were used as a reference framework to assess the OSH awareness of the cemetery workers. This framing is necessary given that cemetery laborers, as informal workers, are not formally covered under RA 11058. The selected items from Section 12(b) represent fundamental OSH principles applicable across different work settings.

The third part used the guidelines from the CSC-DOH-DOLE JMC No. 1, S. 2020.⁸ The JMC was also applied as a proxy framework to assess OSH conditions, recognizing that the circular outlines comprehensive OSH principles that remain relevant even outside the context of formal government employment. Many of the guidelines, particularly those related to workplace safety and emergency preparedness, are fundamental principles applicable to diverse work environments. For the questions under part three, the selected guidelines are under workplace (WP) and emergency preparedness (EP). While the Memorandum likely encompasses a wide array of OSH standards, the

6 Statistics on Trends of Occupational Injury and Related Injuries in the Philippines.

7 IRR of RA 11058 (<https://www.officialgazette.gov.ph/downloads/2018/12dec/20181206-IRR-RA-11058-RRD.pdf>).

8 Guidelines on Occupational Safety and Health Standards for the Public Sector (<https://www.csc.gov.ph/phocadownload/userupload/irmo/government%20issuances/JMC%20No.%201%20s.%202020%20.pdf>)

two allow for a more in-depth exploration of specific aspects of OSH pertinent to Baguio Cemetery workers within the limitations of the informal sector.

Under the second and third parts, some provisions and guidelines were simplified and modified for easier comprehension by the respondents. To measure the questions under the second and third parts, a 4-point Likert Scale was utilized. A reliability test was conducted on 11 construction workers in Victoria Village, Baguio City. Though the primary focus of the study is on cemetery workers, construction workers were selected for pilot testing due to their similar working conditions. The test yielded a coefficient of 0.89 through Cronbach’s Alpha, which indicates acceptable reliability. Lastly, based on the findings of the quantitative part, an interview served as the second instrument.

Treatment of the Data

The following were used in analyzing and interpreting the data. For the first problem, frequency and percentage were used to determine occupation-related injuries and accidents. For the second and third problems, the weighted mean of each competency and guideline was computed. Both problems were then interpreted and analyzed using a 4-point statistical arbitrary range. Table 1 provides the scales for interpretation used to determine the level of awareness and perceived conditions.

Table 1. Scale for Interpretation

Numerical Rating	Weighted Mean	Descriptive Equivalent	
		Awareness	Perceived Conditions
4	3.25-4.00	Full Awareness (FA)/	Excellent
3	2.50-3.24	Moderate Awareness (MA)/	Good
2	1.75-2.49	Partial Awareness (PA)/	Average
1	1.00-1.74	No Awareness (NA)/	Poor

For the fourth problem, to determine the relationship between the level of awareness and the perceived level of conditions, Spearman Rank-Order Correlation (Spearman Rho) was used. The value of the coefficient of correlation (r) was interpreted by the scale in Table 2.

Table 2. Pearson Product-Moment Correlation Coefficient Scale

Correlation Coefficient	Interpretation
$\pm 0.91 - \pm 1.00$	Very High Correlation
$\pm 0.71 - \pm 0.90$	High Correlation
$\pm 0.41 - \pm 0.70$	Moderate Correlation
$\pm 0.21 - \pm 0.40$	Low Correlation
$\pm 0.00 - \pm 0.20$	Very Low Correlation

The qualitative part of the study utilized a descriptive phenomenology method prescribed by Sundler et al. (2019). Quinto (2024) explained that this method involves identifying themes by using quotes or codes. The objective was to express the important insights and experiences of the respondents.

Results

Work-related injuries experienced by Baguio City cemetery workers

This part presents the frequency and percentage of work-related injuries experienced by Baguio City cemetery workers. The categories of the types, causes of injuries, and injured body parts were based on Lu (2021) and PSA (2019).

Table 3. Work-related Injuries

Type of Injury	Frequency	Percentage	Rank
Superficial Injuries and Open Wounds	32	97%	1st
Dislocations, Sprains, and Strains	25	75.8%	2nd
Fractures	9	27.3%	5th
Concussion and Internal Injuries	8	24.2%	6th
Burns, Corrosions, and Scalds	18	54.5%	3rd
Foreign Body in the Eye	17	51.5%	4th
Injured Body Part			
Head	12	36.4%	4th
Neck	4	12.1%	6th
Back	9	27.3%	5th
Arm and Shoulder	20	60.6%	2nd
Wrist and Hand	31	93.9%	1st
Lower Extremities	13	39.4%	3rd

Table 3 (continuation)

Cause of Injury	Frequency	Percentage	Rank
The fall of a person	11	33.3%	5th
Struck by falling objects	16	48.5%	3rd
Stepping on or striking against an object	22	66.7%	1st
Over-exertion or strenuous movement	20	60.6%	2nd
Exposure to or contact with electric current	8	24.2%	6th
Exposure to or contact with a harmful substance	15	45.5%	4th
Caught in or between objects	16	48.5%	3rd

Table 3 shows the type of injuries, injured body parts, and cause of injuries experienced by the respondent cemetery workers. Superficial injuries and open wounds ranked first at 32 out of 33 or 97%; followed by dislocation, sprains, and strains at 75.8%, while burns, corrosions, and scalds ranked third with 18 out of 33 or 54.5%.

In terms of the injured body parts, most of the workers (31 out of 33 or 93.9%) had injuries to the wrist and hand. Second was the arm and shoulder, which accounted for 60.6%, followed by the lower extremities at 39.4%.

The number one cause of injury was stepping on or striking against an object, which was experienced by 66.7% of the respondents; second was over-exertion or strenuous movement, at 66.7% while being struck by falling objects and caught in or between objects both ranked third at 48.5%.

These findings attest to injuries incurred among cemetery workers. Specifically, under types of injury, consistent with the PSA (2019) data and the study of Lu (2021), the first most common types were superficial injuries and open wounds, while the second were dislocations, sprains, and strains. However, the third most common injury consisted of burns, corrosions, and scalds, which contrasts with Lu’s (2021) findings of the third most common, which were fractures. Fractures among the cemetery workers ranked fifth in the study.

As for body parts, wrist and hand injuries were the most frequently reported by cemetery workers, which is similar to the 2019 PSA data and Lu (2021). Differing from the 2018 national data, in which lower extremities were ranked second while arms and shoulders were third, the most commonly injured body parts were the arm and shoulder at second followed by lower extremities.

In terms of the cause of injuries, the findings share the national data provided by Lu (2021) and PSA (2019) that the primary or immediate cause of injuries is stepping on or striking against an object, and the third cause is being struck by falling objects and caught in or between objects. However, contrary to the findings of Lu (2021), the second leading cause of injuries based on the findings of the study is over-exertion or strenuous movement.

Level of awareness of OSH programs among Baguio City cemetery workers

The indicators on the level of perceived awareness of OSH programs were based on the selected standards of the OSH Program for medium to high-risk establishments as prescribed under Section 12(b) of the IRR of RA 11058. Table 4 presents the findings of the study.

Table 4. Level of Awareness of OSH Programs among Baguio City Cemetery Workers

Selected OSH Program for medium to high risk	Level of Awareness			
	Weighted Mean	Standard Deviation	Description	Rank
1. Company/Institution commitment to comply with the OSH requirement	2.21	1.05	PA	8 th
2. Safety and health hazard identification, risk assessment and control (HIRAC)	2.30	0.81	PA	4 th
3. Medical surveillance for early detection of occupational and work-related diseases	2.21	0.96	PA	8 th
4. First aid and emergency medical services	2.24	0.83	PA	7 th
5. Promoting a drug-free workplace	2.33	0.96	PA	5 th
6. Complete the company or project detail	2.09	0.87	PA	11 th
7. Composition and duties of the OSH Committee	1.82	0.81	PA	14 th
8. OSH personnel and facilities	1.83	0.80	PA	13 th

Table 4 (continuation)

Selected OSH Program for medium to high risk	Level of Awareness			
	Weighted Mean	Standard Deviation	Description	Rank
9. Work Permit System	2.21	0.82	PA	8th
10. Conduct of toolbox or safety meetings and job safety analysis	2.06	0.93	PA	12th
11. Accident/incident/illness investigation, recording and reporting	2.15	0.83	PA	9th
12. Provision and use of personal protective equipment (PPE)	2.52	0.80	MA	1st
13. Provision of safety signage	2.30	0.88	PA	5th
14. Dust control and management	2.40	0.90	PA	3rd
15. Regulations on activities such as building temporary structures, and lifting and operating electrical, mechanical, and other equipment	2.27	0.88	PA	6th
16. Provision of workers' welfare facilities	2.12	0.82	PA	10th
17. Emergency and disaster preparedness and response plan	2.12	0.82	PA	10th
18. Solid waste management system	2.40	0.90	PA	3rd
19. Control and management of hazards	2.46	0.87	PA	2nd
20. Prohibited acts and penalties for OSH violations	2.12	0.93	PA	10th
OVERALL MEAN	2.21		PA	

Note: PA – partially aware; MA – moderately aware

The findings in Table 4 indicate that the selected cemetery workers were only partially aware (PA) of OSH standards. Based on the selected OSH Program for medium to high risk, almost all programs fall under PA. In contrast, only one program standard, which is “provision and use of personal protective equipment (PPE),” falls under moderately aware (MA) with a mean of 2.52, and was the highest program standard the workers were aware of. The second program that the workers were aware of was control and management of hazards, with a mean of 2.46, followed by dust control and management, and the solid waste management system both having a mean of 2.40. The programs they were least aware of were the composition and duties of the OSH committee, with a mean of 1.82, OSH personnel and facilities with a mean of 1.83, and the conduct of toolbox or safety meetings and job safety analysis, with a mean of 2.06.

The findings indicate that the selected cemetery workers were only partially aware of OSH programs. The descriptive method was employed in interviews with some of the respondents to further understand the findings under the level of awareness. The interviews revealed that most of the respondents also worked on various construction projects when there was no work at the cemetery. According to them, some of the selected programs of OSH were introduced to them during their stay in other construction sites, especially in large-scale projects such as housing in subdivisions or buildings. One of the workers stated:

Sa buildings, talaga tinuturo at kailangan sundan 'yong safety. [At buildings (constructions), safety is always taught and enforced].

Another narrated, *“Pag sa construction site, may orientation sa safety. Pero istrikto rin iyong engineer. Hindi tulad sa sementeryo, wala. [In construction sites, there are orientations on safety. Also, the engineer is strict. Unlike in the cemetery, there is none].*

Interestingly, some OSH programs are introduced if the projects have site supervisors or engineers. As reflected in the findings, some of the programs were introduced, like the use of PPEs, proper scaffolding, chemicals used in construction, side effects, adequate handling of electrical and mechanical equipment, etc. According to one respondent:

Kahit wala pa naman 'yang OSH na 'yan, naituturo naman na mga 'yan noon. Madalas 'yong mga engineers o senior na foreman. [Even prior to OSH, these concepts were already taught before. Most of the time, by the engineers or the senior foreman].

Based on the accounts of workers, it must be noted that these programs were not just directly introduced for OSH standards compliance but because these are essential skills necessary in construction work.

Baguio Cemetery workers were either partially or least aware of programs such as composition and duties of the OSH committee, OSH personnel and facilities and conduct of toolbox or safety meetings and job safety analysis because these committees neglected to involve them in such activities. One respondent explained that:

Uray jay construction, dagitoy boss, foreman ken engineer lang ti agmimeeting. Dakami, pulos. [Even in construction, only the boss, foreman and engineers have meetings. Us, none].

They perceived that these committees, personnel, and facilities were only reserved and exclusive to the higher-ups of the projects which are mainly comprised of the owner, foremen, engineer, and other professionals.

Level of perceived conditions of the Baguio City cemetery workers regarding OSH Standards

For the level of perceived conditions, the indicators are selected OSH guidelines from CSC-DOH-DOLE JMC No. 1, S. 2020 (Guidelines on Occupational Safety and Health Standards for the Public Sector). The selected guidelines are WP and EP.

Table 5. Level of Perceived Conditions of Baguio City Cemetery Workers regarding OSH Standards

Selected OSH Standards	Level of Compliance			
	Weighted Mean	Standard Deviation	Description	Rank
WP (Workplace)				
1. Presence of adequate fire, emergency or danger signs	1.61	0.50	Poor	5 th
2. Presence of facilities for persons with disabilities for their safety and convenient movement	1.55	0.51	Poor	6 th
3. Good housekeeping is maintained (cleanliness of workplace)	1.85	0.71	Average	4 th
4. Presence of Sanitary facilities (e.g., comfort rooms and lavatories)	2.30	0.77	Average	1 st
5. Maintaining building, space requirement, walkway surface, floor and wall openings from hazards	2.15	0.71	Average	2 nd
6. Availability and provisions for personal protective equipment and devices	2.00	0.71	Average	3 rd
7. Handling, use and storage of hazardous materials are addressed properly	1.85	0.71	Average	4 th
8. Provisions for health clinics or treatment Room	1.48	0.62	Poor	7 th
OVERALL MEAN	1.18		Poor	

Table 5 (continuation)

Selected OSH Standards	Level of Compliance			
	Weighted Mean	Standard Deviation	Description	Rank
EP (Emergency Preparedness)				
1. Risk Reduction Management System and a Crisis Management Plan and Contingency Program is provided	1.42	0.50	Poor	3 rd
2. Trainings and drills on Disaster Risk Reduction Management are provided	1.48	0.51	Poor	2 nd
3. Emergency supplies such as extinguishers, medical first aid kits, etc. among others are provided	1.58	0.56	Poor	1 st
4. There is a first aider trained and duly certified or accredited by the Philippine National Red Cross or by any authorized Organization	1.42	0.50	Poor	3 rd
5. Presence of a Memorandum of Understanding/Memorandum of Agreement with the nearest government health facility for emergency medical services for occupational accidents and injuries	1.42	0.50	Poor	3 rd
OVERALL MEAN	1.47		Poor	

Based on Table 5, the workers generally perceived that the Baguio City Cemetery has poor conditions regarding the selected WP guidelines.

The perceived poor to average conditions of the Baguio City Cemetery on selected WP guidelines can be attributed to the misperception of some cemetery workers and the management that some guidelines cannot be directly enforced since the cemetery is not primarily a workplace. In particular, one representative of the cemetery management argued that:

Based sa job description namin, 'yong trabaho lang namin dito ay magmonitor ng mga ililibing, imanage 'yong mga puntod, landscaping, at i-maintain 'yong kalinisin. Tapos sa mga kontrata at presyuhan sa paggawa ng puntod or paglibing, hindi na makikialam ang CEPMO. Basta ang babantayan lang namin ay kung sumusunod sila sa sanitation code at zoning. [Based on our job description, our job only focuses on monitoring the burial,

managing the tombs, landscaping, and maintaining cleanliness. Regarding the contracts and pricing of tombs or burial (by the workers), CEPMO will not intervene. We just make sure that they will comply with the sanitation code and zoning].

Another official pointed out the following:

Kung tutuusin, ang classification ng sementeryo ay isang park... Kung iinterpret natin 'yong batas, parks are beyond the commerce of man. Kaya, literal, bawal 'yong pagtanggap ng projects. Kaso hindi maiiwasan, kasi sino ang gagawa ng mga puntod if walang gagawa sa family ng namatayan? ... At iyon din ang reason kaya wala tayo masyadong guidelines sa workplace. In the first place, hindi naman talaga siya workplace, park siya. Kaya iyon siguro kaya considered silang informal [Technically, the cemetery is a park... If we interpret the law, parks are beyond the commerce of man. Therefore, literally, accepting projects is prohibited. However, it can't be avoided because who will take care of the graves if there's no one from the deceased's family to do it? ... And that's also the reason why we don't have many guidelines in the workplace. In the first place, it's not really considered a workplace; it is a park. That is why they are considered informal].

The management argues that they only adhere to their job descriptions based on the primary functions of a cemetery, which serves as a resting place for the dead (Rugg, 2000). This is why the cemetery's role as a source of livelihood is perceived to be secondary and it also creates a misperception that the cemetery is not a workplace. Moreover, policies such as Article 1347 and 1409 of the Civil Code,⁹ Section 458 of the Local Government Code of 1991,¹⁰ and Presidential Decree 957,¹¹ instilling the principle that public spaces such as parks are beyond the commerce of men shapes the belief of the management to focus on the cemetery's societal function and not too much on considering and regulating the cemetery workers. However, providing less attention to the working conditions of workers also undermines OSH standards. This perception can also be confirmed by the lack of specific policies on OSH governing cemetery works. While the City Government of Baguio

9 Republic Act No. 386

10 Republic Act No. 7160

11 Defining 'Open Space'

has two administrative orders (AO) (City AO 111 s 2012¹² and AO 156 s 2015¹³) governing its cemetery, only a few provisions prescribe rules or guidelines on how work should be conducted. The provisions only prescribe how workers should conform to the construction of structures such as burial lots, tombs, and/or niches and the conduct of exhumations. The absence of an OSH work-related policy in the cemetery also contributes to the low perception of its OSH conditions.

Also, it seems that some of the workers and management have a misunderstanding or misconception about what constitutes a workplace. One of the cemetery workers stated:

Saanmi a makitam ti sementerio nga kasla dakkel a pagtrabahoan. Saan to kasla factory wenno opisina a napanunot ken naorganisar a lugar. [We don't see the cemetery as a typical workplace. It's not like a factory or an office where you have a structured environment].

Another also stated that, *"Bakit kailangan ba naming mag helmet, hindi naman building dito? [Why do we need to wear a helmet. This is not a building (referring to the construction site)?]."*

One likewise argued, *"Haan met kasapulan dagitoy PPEs, fire designs, ken clinic ti sementerio [PPEs, fire designs, and clinics are not really needed in the cemetery]."*

Based on their accounts, they may associate the term "workplace" with industrial or commercial sites. However, according to DO 198 Section 3 (aa), a workplace "refers to any site or location where workers need to be present or to go to by reason of their work." Furthermore, Section 3 (c) clarifies that covered workplaces include, "establishments, projects, sites, and all other places where work is being undertaken wherein the number of employees, nature of operations, and risks or hazards involved in the business require compliance with the provisions of this Rule." Since there are ongoing work activities at the Baguio City Cemetery, it qualifies as a workplace and must adhere to OSH guidelines.

12 Guidelines and Policies of the Baguio City Public Cemetery Operations and Services

13 Supplemental Guidelines and Policies Governing the Operations and Management of the Baguio Public Cemetery

Regarding the selected EP guidelines, the workers perceived the condition of the Baguio City Cemetery as poor. Interestingly, all guidelines were perceived as poor. In terms of EP, the highest perceived guideline was on emergency supplies followed by training and drills on disasters. The remaining guidelines ranked third and were also the least perceived guidelines on EP.

The perceived poor condition of all EP guidelines can be attributed primarily to the reality that the OSH enforcement in the cemetery is not a main priority among government authorities. In relation, enforcing both EP and WP guidelines faces budget and time constraints. Guidelines such as Crafting a Risk Reduction Management System and a Crisis Management Plan, training in Disaster Risk Reduction Management and first aid, and investing in emergency supplies require financial resources which are deemed to be costly. As argued by one of the informants from management:

Maysa, limited ti budget tayo. Maikadwa, jay pondo tayo nakafocus lang iti maintenance ken management ti parks tayo. Noh ada para ti human resource, para ti CEPMO personnels laeng. Nget uray dakami, kurang ti seminars nga kakasta. [First, we have a limited budget. Second, our funds only focus on the maintenance and management of our parks. If we have (funds) for human resources, it is limited to CEPMO personnel. But even for us (CEPMO), there is a shortage of seminars].

Moreover, since one characteristic of the informal sector is that it is seasonal workers (Nguyen & Cunha, 2019), government and formal organizations perceive that investing resources in cemetery workers may be futile. One of the cemetery management representatives argued that:

Agpatraining ka met kinyada, haan da met bumayeg dita sementeryo [You'll be conducting trainings for them (cemetery workers), they will not even last long (working) in the cemetery].

Hence, it was perceived that providing training and programs for these workers is not a priority due to budget constraints and may not yield long-term benefits for the cemetery, as they may leave before fully applying the skills learned.

Table 6. Overall Level of Perceived Conditions of the Baguio City Cemetery Workers regarding OSH Standards

Level of perceived conditions of the Baguio City Cemetery OS guidelines	Weighted Mean	Description
1. WP	1.90	Average
2. EP	1.47	Poor
OVERALL MEAN	1.68	Poor

In summary, the Baguio City Cemetery's condition regarding OSH standards as perceived by Baguio City cemetery workers is poor, with a mean of 1.68. Specifically, WP shows a mean of 1.90 connoting average condition, while EP is perceived as poor condition with a mean of 1.47.

Relationship of the level of awareness of OSH programs among Baguio City cemetery workers and the level of perceived conditions of the Baguio City cemetery workers regarding OSH standards

Table 7. Correlation (Spearman Rho)

Spearman Correlation	0.505
Interpretation	Moderate Correlation
Significance (two-tailed)	0.003*

**Correlation is significant at the 0.05 level (two-tailed)*

Based on the correlation results in Table 7, there is a moderate correlation (0.505) between the awareness of OSH programs among Baguio City cemetery workers and the Baguio City Cemetery's conditions as perceived by its workers. Moreover, the findings indicate that $p < 0.05$ connotes a significant relation between the two variables, suggesting that the level of awareness of OSH programs is associated with the perceived level of conditions. In detail, Table 8 presents a segregated correlation between the level of awareness of OSH programs and the perceived level of conditions based on selected WP and EP guidelines.

Table 8. Level of Awareness of OSH Programs Among Baguio City Cemetery Workers Correlated to Level of Perceived Conditions regarding WP and EP Guidelines

Level of Perceived Conditions	Coefficient of Correlation (Spearman <i>Rho</i>)	Level of Awareness of OS programs	Qualitative Description
WP	Correlation Coefficient	0.655	Moderate Correlation
	Sig. (2-tailed)	0.000*	Significant
EP	Correlation Coefficient	0.209	Very Low Correlation
	Sig. (2-tailed)	0.242	Not Significant

*Correlation is significant at the 0.05 level (two-tailed)

In terms of the segregated data, WP implies a moderate correlation ($r = 0.655$) while EP indicates a very low correlation ($r = 0.209$) when correlated with the level of awareness of OSH programs. Furthermore, only the WP shows significance ($p < 0.05$), which suggests that, in terms of the perceived level of conditions of Baguio City cemetery about selected OSH programs, only the WP can be attributed to the level of awareness of OSH programs among Baguio cemetery workers. The correlation findings adhere to other OSH studies involving the informal sector workers wherein OSH awareness is significantly associated with OSH conditions (Fung et al., 2016; Hu et al., 1998; Asuncion, 2018). However, the study also indicates a moderate correlation, which differs from a strong correlation finding in such studies, including Arante (2011) and Uzuntarla et al. (2020). This can be attributed to the segregated correlation data (Table 8), wherein the correlation of awareness between EP poses very low correlations and non-significance compared to WP, which presents a moderate and significant relationship.

Like the discussions on the perceived level of conditions, cemetery workers and the cemetery management may perceive EP measures as less relevant to their immediate concerns than WP, thus diminishing the correlation with awareness of OSH programs. In contrast to EP, the emphasis on WP having a significant relationship with the awareness of OSH programs underscores that cemetery workers may benefit from focused interventions that prioritize WP protocol, aligning with their day-to-day experiences and concerns.

Conclusions

Just like workers in the informal sector and the construction industry, work-related injuries and accidents do occur among cemetery workers, and they often face higher risks due to the nature of their work. This is attested by the findings on the types of injuries, body parts injured, and the cause of injuries.

Furthermore, the partial awareness of OSH programs among workers suggests a gap in training and education, particularly for jobs classified as medium to high risk, and a lack of involvement in OSH planning. Even if some of the workers have prior experiences or encounters with OSH programs, findings indicate that their OSH awareness is poor and needs improvement. Also, like informal and construction workers, cemetery workers may not be fully aware of their rights or the safety regulations governing their work, leaving them susceptible to unsafe working conditions.

The perception of poor conditions of OSH standards at the Baguio City Cemetery is noteworthy and emphasizes an issue that extends to other informal sector groups. The findings share that in both the informal sector and the construction industry, enforcement of OSH standards may be lenient, and conditions may be inconsistent due to various factors, such as prioritizing the actual purpose of the cemetery over safety, impracticality, and limited resources. Moreover, the low or poor perception of OSH conditions in the City Cemetery indicates potential shortcomings in implementing OSH policies and regulations within the workplace.

Lastly, the moderate correlation and significant relationship between the level of awareness of OSH programs among cemetery workers and the perceived conditions of the Baguio City Cemetery highlight the interconnectedness of OSH awareness and perceived conditions. This relationship is likely clear with other informal sector workers and those in the construction industry, emphasizing the importance of increasing OSH awareness in promoting an environment of safety and improving conditions with OSH standards.

Recommendations

The prevalence of work-related injuries, low awareness of OSH programs among cemetery workers, and perceived poor conditions of OSH standards in the cemetery underscore the need for improved safety measures and awareness programs within this sector. Thus, cemetery management and relevant authorities need to address these perceived deficiencies promptly to ensure the safety and well-being of cemetery workers.

First, the Baguio City Cemetery must require, or if possible, provide, the workers with PPEs to prevent any injuries. In particular, the Cemetery must prioritize the issuance of gloves among other PPE since the prevailing injured body parts are the hands and wrists.

Second, workers and the cemetery management must be required to attend training and seminars on OSH conducted by the DOLE. It is highly recommended that the Baguio City Cemetery, through CEPMO or the City Government of Baguio, host and give free training to the cemetery workers.

Third, the Baguio City Cemetery, through CEPMO, should craft policies governing the nature of work in the cemetery. Although there are policies such as administrative orders (AOs) governing the City Cemetery (City AO 111 s 2012 and AO 156 s 2015), there is a need to supplement such AOs. The policies must be based on OSH standards, taking into consideration RA 11058 and CSC-DOH-DOLE Joint Memorandum Circular No. 1, S. 2020.

Fourth, it is also suggested that the cemetery workers establish and register a workers' association or organization. The association will improve the welfare of the cemetery workers since it will bridge the workers' access to social protection, safety, health, and well-being. Moreover, the association will aid in monitoring and policing the cemetery workers, in such cases, enforcing OSH.

Fifth, there should be an initiative to create or push for enacting a Magna Carta for the informal sector. Various studies, including this one, validate the vulnerability of groups in the informal sector. Hence, crafting a Magna Carta is urgent to lessen the risks and vulnerability of the informal

sector. The need for a Magna Carta has been a sentiment from various stakeholders and legislators to improve and protect informal sector workers. However, there has yet to be progress regarding the proposed legislation. If the Magna Carta is pursued, it shall include measures to enhance informal sectors' rights, particularly social protection such as health benefits, insurance, and a decent work environment.

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