A Recent Situational Analysis of the Occupational Safety and Health Landscape in the Philippines

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ABSTRACT

Objectives. Workers are continuously exposed to occupational hazards and risks. By analyzing recent data on the status of occupational safety and health (OSH) in the Philippines, this study aimed to determine the common occupational injuries and diseases among Filipino workers, and preventive and control measures/activities and occupational safety and health policies and programs implemented across the country.

Methods. A review of data on Philippine OSH from the Integrated Survey of Labor and Employment (ISLE) by the Philippine Statistics Authority (PSA) covering data from 2015/2016, 2017/2018, and 2019/2020 was done. The number of occupational injury cases, types of injuries, and types of diseases were assessed as well as the implementation of OSH policies and programs. Descriptive statistics, simple T-test, and Pareto analysis were used to analyze the collated data sets.

Results. The number of occupational injury and diseases in the Philippines across industries are decreasing. Superficial injuries and open wounds (56.47%), and Work-related Musculoskeletal Diseases (WMSDs) (61.82%) top the list as the most common injury and disease across industries, respectively. In 2018, OSH programs and preventive and control measures underwent reforms due to the implementation of the Republic Act (RA) 11058. For OSH programs, there is an increase in implementation between 2015 and 2019.

Conclusion. Occupational injury and occupational diseases in the Philippines across industries are declining. In terms of OSH measures and programs, there has been a significant change over the years, especially after the introduction of RA 11058 in 2018. A rise in the implementation of measures and policies was noted. However, there are still gaps that need to be addressed.

Keywords: occupational medicine, occupational health, public health, preventive medicine

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INTRODUCTION

Occupational accidents and work-related diseases have multifaceted effects on individuals and their families as well as the economy and society on a much wider level. According to studies, only an estimated 2.2 million Filipinos enjoy effective occupational safety and health (OSH) protection and services in medium and large enterprises, implying that 17 out of 18 persons in the labor force are exposed to occupational hazards and risks due to the lack of acceptable working conditions.[1] While both formal and informal workers are exposed to occupational hazards, the latter was found to be more vulnerable due to the almost non-existent regulations protecting them.[2]

A problematic concern is the fragmented data due to poorly defined work by the industry system. For instance, the informal sector consists of employees from the farming and mining sectors which may result in extremely varied reported injuries and workplace hazards due to the inherent differences in work environment and nature. Thus, creating meaningful interventions that target specific workplace hazards are significant.

This situational analysis consolidates recent data in the Philippine OSH advocacy and generates analyses that can particularly assist in national policy and program development. Particularly, we aimed to describe the common occupational injuries and diseases among Filipino workers. We also aimed to identify preventive and control measures/activities and occupational safety and health policies and programs implemented across the country.

MATERIALS AND METHODS

The methodology of this descriptive study consisted of a comprehensive records review of data on Philippine OSH from the Integrated Survey of Labor and Employment (ISLE) by the Philippine Statistics Authority (PSA), which is a modular survey that collects data on indicators related to employment, workers' welfare and protection, and labor relations. This is conducted in close coordination with Regional Statistical Services Offices (RSSOs) and Provincial Offices (PSOs) of PSA. This study covered data from the following periods: 2015, 2017, and 2019. This period contains the latest data and statistics available on OSH in the Philippines. Data for the later years are not yet released at the time when the study was conducted. The data analyzed included the following parameters: number of occupational injury cases, types of injuries, and types of diseases. The study also includes a discussion on the implementation of OSH policies and programs.

Descriptive statistics and Pareto analysis were used to analyze the data sets. The Pareto analysis identified the most significant variables following the 80/20 rule, which asserts that 80% of the effects stem from 20% of the causes. Thus, it has great value in policy development and programming by making better use of limited resources and prioritizing the main contributors to a problem.[3]

For Pareto Analysis, the total cases of occupational injuries and occupational diseases from 2015-2019 were examined. However, for preventive and control measures, and OSH policies and programs, only the 2019 data on the number of establishments implementing these measures were used due to the lack of data for most programs in 2015 and 2017. Consequently, cumulative numbers across 2015, 2017, and 2019 could not be obtained. Pareto analysis identified the top and most vital industries, injuries, diseases, and preventive and control measures by determining which variables were included within the cumulative percentages of 80%. Additionally, a simple T-test using Microsoft Excel was conducted to determine if there was a significant difference in the number of cases per category between the 2015 and 2019 data. A p-value of less than 0.05 was considered to be statistically significant. The study does not have an involvement of patients and the public in its methodology.

RESULTS

Proportions and disease prevalences were not analyzed because the ISLE dataset does not provide the necessary information to calculate these metrics. Instead, we relied on absolute counts, which were the only available data, to assess trends in occupational injuries and diseases. This approach also allowed us to evaluate the implementation of preventive measures, control activities, and occupational safety and health policies and programs in the Philippines.

Occupational Injuries and Diseases

By Type of Injury

The number of occupational injury cases in the Philippines across industries are decreasing; there is a 19.76% reduction in total cases recorded when 2015 and 2019 data were compared. However, for the Administrative and Support Service Activities sector (N), Construction (F), Human Health and Social Work Activities (Q), and Arts, Entertainment, and Recreation (R), an increase of 248.27%, 82.98%, 28.67% and 19.73%, respectively, from 2015 to 2019 were noted (Table 1).[4-6] Despite the differences in the number of cases across sectors from 2015 to 2019, the change is not significant (P-value = 0.31).

The significant industries that contribute to majority of the occupational injuries are the following: Manufacturing (47.87%), Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles (10.42%), Accommodation and Food Service Activities (8.53%), Administrative and Support Service Activities (6.65%), Construction (5.77%), and Agriculture, Forestry, and Fishing (4.76%).

In terms of the type of occupational injury, Acute Poisonings and Infections had the biggest decline (-66.53%) (Table 2). However, an increase in Superficial and Open

Table 1. The Number of Occupational Injury Cases in Establishments Employing 20 or more Workers by Industry Group (in number of cases). *Includes all establishments and workers across the Philippines from 2015 to 2019*

	Industry	2015	2017	2019	Total	Total%	% Change from 2015 and 2019
C	Manufacturing	25,667	23,003	17,454	66,124	47.87	-32.00
G	Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	5,799	5,259	3,341	14,399	10.42	-42.39
I	Accommodation and Food Service Activities	4,995	2,959	3,824	11,778	8.53	-23.44
N	Administrative and Support Service Activities	1,303	3,348	4,538	9,189	6.65	248.27
F	Construction	2,115	1,986	3,870	7,971	5.77	82.98
A	Agriculture, Forestry, and Fishing	3,236	2,194	1,144	6,574	4.76	-64.65
H	Transport and Storage	2,452	1,607	1,767	5,826	4.22	-27.94
P	Education	1,591	1,577	1,433	4,601	3.33	-9.93
Q	Human Health and Social Work Activities	750	919	965	2,634	1.91	28.67
D	Electricity, Gas, Steam, and Air Conditioning Supply	684	676	628	1,988	1.44	-8.19
R	Arts, Entertainment, and Recreation	674	460	807	1,941	1.41	19.73
B	Mining and Quarrying	528	486	244	1,258	0.91	-53.79
K	Financial and Insurance Activities	341	468	378	1,187	0.86	10.85
M	Professional, Scientific and Technical Activities	159	533	136	828	0.60	-14.47
E	Water Supply; Sewerage, Waste Management and Remediation Activities	248	284	136	668	0.48	-45.16
J	Information and Communications	135	308	172	615	0.45	27.41
L	Real Estate Activities	149	198	49	396	0.29	-67.11
S	Other Service Activities	136	19	7	162	0.12	-94.85
	Total	**50,962**	**46,284**	**40,893**	**138,139**		**-19.76**

Note: Data analyzed from PSA, ISLE 2015/2016, 2017/2018 and 2019/2020[4-6]

***P*-Value**	0.31

Table 2. The Number of Types of Injuries in Establishments Employing 20 or more Workers by Type of Injury (in number of cases). *Includes all establishments and workers across the Philippines from 2015 to 2019*

Type of injury	2015	2017	2019	Total	Total%	% Change from 2015 and 2019
Superficial Injuries and Open Wounds*	10,042	10,561	11,155	31,758	56.47	11.08
Dislocations, Sprains, and Strains	2,254	2,488	1,203	5,945	10.57	-46.63
Fractures	1,572	2,228	1,184	4,984	8.86	-24.68
Burns, Corrosions, Scalds, and Frostbites	1,509	1,749	1,343	4,601	8.18	-11.00
Concussions and Internal Injuries*	880	1,442	1,713	4,035	7.18	94.66
Foreign Body in the Eye	1,101	1,558	728	3,387	6.02	-33.88
Acute Poisonings and Infections†	245	452	82	779	1.39	-66.53
Traumatic Amputations	228	294	146	668	1.19	-35.96
Others	28	26	23	77	0.14	-17.86

Note: Data analyzed from PSA, ISLE 2015/2016, 2017/2018 and 2019/2020[4-6]

**Combined categories for 2019 data: Superficial Injuries and Open Wounds = Superficial injuries and open wounds; Concussions and Internal Injuries = Injury of muscles and tendons, nerves / part of body, and blood vessels, and crushing injury*

†*Equivalent category for 2019 data: Acute Poisonings and Infections = Toxic effect of substances (non-medicinal)*

***P*-Value**	0.89

Wounds (11.08%), as well as Concussions and Internal Injuries (94.66%) from 2015 to 2019, are notable.

The following types of injuries were found to be the most vital, which means that these are within the cumulative percentage of 80% across all types: Superficial Injuries and Open Wounds (56.47%), Dislocations, Sprains, and Strains (10.57%), Fractures (8.86%) and Burns, Corrosions, Scalds, and Frostbites (8.18%). Despite the changes over the years, these are still not significant enough (P-Value = 0.31).

By Type of Disease

The data on types of diseases are shown in Table 3 and there was a decrease in cases (-56.35%). The most decreases were seen in Occupational Lung Diseases and Chilblain, Frostbite, and Freezing (-87.58% and -82.87%, respectively). However, these changes were insignificant (P-value = 0.20). Among the specific diseases identified, only Occupational Kidney Diseases were found to be rising (+12.63%).

The diseases that are part of the vital few are the following: Work-Related Musculoskeletal Diseases (WMSDs) (61.82%), Essential Hypertension (10.28%), Occupational Asthma (5.74%), and Occupational Dermatitis (5.64%).

Administrative and Support Service Activities, Manufacturing, and Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles are the industries with the most number of occupational diseases recorded. The type of disease with the greatest number of cases may vary per industry. In general, WMSDs tops the list for most sectors with back pain being the most common WMSD subtype recorded. However, Essential Hypertension, Occupational Dermatitis, and other WMSDs were noted to have the highest number of cases in the Information and Communications, Arts, Entertainment, and Recreation, and Other Service Activities industries, respectively. Though Essential Hypertension was removed in 2019 because it was not classified as an occupational disease upon evaluation of stakeholders.

Occupational Safety and Health Practices

Preventive and Control Measures

Generally, there is an increase in implementation of preventive and control measures between 2015 and 2019. Posting of safety signages or warnings topped the list for both 2017 and 2019 while appointment of OSH personnel was the most widely implemented measure in 2015. Interventions such as the practice of proper handling of chemicals/hazardous materials, the provision of appropriate personal protective equipment (PPE) such as hard hats, safety shoes, safety goggles, etc., and regular monitoring of hazards such as chemicals, noise, and heat in work areas garnered the highest percent changes at 62.38%, 59.34%, and 56.02%, respectively. While the appointment of OSH personnel is

Table 3. The Number of Types of Diseases in Establishments Employing 20 or more Workers (in number of cases). *Includes all establishments and workers across the Philippines from 2015 to 2019*

Type of disease	2015	2017	2019	Total	Total%	% Change from 2015 and 2019
Work-related Musculoskeletal Diseases (WMSDs)*	85,021	57,137	40,284	182,442	61.82	-52.62
Essential Hypertension†	14,539	15,806	N/A	30,345	10.28	N/A
Occupational Asthma	8,363	5,506	3,080	16,949	5.74	-63.17
Occupational Dermatitis	6,196	5,349	5,112	16,657	5.64	-17.50
Other Infections	3,559	5,394	1,805	10,758	3.65	-49.28
Tuberculosis	3,320	3,466	2,477	9,263	3.14	-25.39
Occupational Lung Disease	6,602	1,309	820	8,731	2.96	-87.58
Other Diseases	239	4,748	1,185	6,172	2.09	395.82
Cardiovascular Diseases (CVDs)	1,567	987	1,486	4,040	1.37	-5.17
Other Disease Caused by Chemicals	666	2,570	131	3,367	1.14	-80.33
Heat-Related Disorders	1,078	1,309	773	3,160	1.07	-28.29
Deafness	309	596	211	1,116	0.38	-31.72
Occupational Kidney Disease	190	351	214	755	0.26	12.63
Cataract	309	313	113	735	0.25	-63.43
Chillblain, Frostbite, Freezing	321	253	55	629	0.21	-82.87
Total	***132,279***	***105,094***	***57,746***	***295,119***		***-56.35***

Note: Data analyzed from PSA, ISLE 2015/2016, 2017/2018 and 2019/2020[4-6]

**Combined categories into WMSDs: back pain, NSP, other WMSDs, carpal tunnel syndrome (CTS) and shoulder tendinitis*

†*Removed in 2019 since it is not considered as an occupational disease*

***P*-Value**	0.20

one of the top preventive control measures, the change from 2015 to 2019 was the smallest at only 6.21%. It was also found that the change of the preventive and control measures and activities from 2015 to 2019 were not significant (P-value = 0.61). Across the years, the measures that were found to be the most vital are numbers 1 to 15 as seen in Table 4.

Occupational Safety and Health Policies / Programs

The top policies and programs for 2015 and 2017 are Fire Prevention and Control Program, Drug-free Workplace Policy and Program, and Emergency Response Preparedness Program (Table 5). However, the most implemented program in 2019 were Policy on Smoke-free Workplace, Fire Prevention and Control Program, and Policy and Program on Anti-Sexual Harassment. Moreover, heat stress management programs were least executed despite its addition in 2017 and was then removed from the list of programs in 2019.

In 2019, the most widely implemented health programs and policies are 1 to 31 as seen in Table 5. Department of Labor and Employment (DOLE)-approved Construction Safety and Health Program (CSHP) (for contractors in the construction industry) and others declined in terms of implementation across establishments from 2015 and 2019 at -92.42% and -48.72%, respectively. The programs which garnered the highest percent change in implementation from 2015 to 2019 include Program on Ergonomics (97.29%), Policy on Non-discrimination of Workers with HIV Infection (86.64%), Policy on Non-discrimination of Workers with Hepatitis B (82.56%), and Policy on Non-discrimination of Workers with Tuberculosis (TB) (74.17%). Taking all these trends and changes in consideration, the change from 2015 and 2019 was also found to be statistically significant (P-value = 0.00000004).

DISCUSSION

Occupational Injuries and Diseases

In the Philippines, the most common occupations are elementary occupations, service and sales workers, and skilled agricultural, forestry, and fishery workers. These jobs involve physical effort and hand-held tools, provision of personal and protective services, and skills in agriculture, forestry and fishery, respectively.[7] Lower-middle income countries (LMIC) are known to have more cases of occupational injuries since the majority of the occupations involve physical and hazardous work.[8,9] There also exists an array of problems that put employees in developing countries at greater risk, such as poor health service delivery, malnutrition, and absence of regulations.[8,10]

Incidences of occupational diseases have been decreasing since 2013 while occupational injuries have been fluctuating over the years. Across all industries, WMSDs are common.

Table 4. The Number of Preventive and Control Measures/Activities against Work Safety and Health Hazards by Type of Activity Conducted in Establishments Employing 20 or more Workers (included only vital few measures). *Includes all establishments across the Philippines from 2015 to 2019*

	Preventive and control measures / activities	2015	2017	2019	% Change from 2015 and 2019
1	Posting of safety signages or warnings	25,826	27,892	34,362	33.05
2	Dissemination of info materials on safety and health	20,809	24,118	32,143	54.47
3	Regular inspection and maintenance of equipment	24,461	25,968	31,869	30.28
4	Emergency response preparedness activities for earthquake, fire, chemical spills, etc.	24,476	27,202	31,582	29.03
5	Organized safety and health committee	21,558	24,531	31,406	45.68
6	Periodic medical exam of workers	23,036	24,025	30,042	30.41
7	Use of safety manuals, labels or maintenance procedures	20,136	22,418	28,999	44.02
8	Perform corrective action programs and audits	19,757	21,974	28,858	46.06
9	Evaluated safety and health performance*	N/A	N/A	28,716	N/A
10	Practice proper handling of chemicals/hazardous materials	17,605	20,343	28,587	62.38
11	Appointed Occupational Safety and Health (OSH) personnel	26,758	26,264	28,420	6.21
12	Regular monitoring of hazards in work areas	17,740	20,810	27,678	56.02
13	Provision of appropriate Personal Protective Equipment (PPE)	17,192	19,575	27,393	59.34
14	Assessment of ventilation system*	N/A	N/A	27,332	N/A
15	Submitted Occupational Safety and Health (OSH) Program to Department of Labor and Employment (DOLE) as required by DO 198-18*	N/A	N/A	25,650	N/A

Note: Data analyzed from PSA, ISLE 2015/2016, 2017/2018 and 2019/2020[4-6]

**New categories in 2019*

P-Value	0.61

Table 5. The Number of OSH Policies / Programs Implemented in Establishments Employing 20 or more Workers (the counts pertain to number of establishments that implemented the said program/policy). *Includes all establishments across the Philippines from 2015 to 2019*

	OSH policy / program	2015	2017	2019	% Change from 2015 and 2019
1	Policy on Smoke-free Workplace*	N/A	N/A	32,667	N/A
2	Fire Prevention and Control Program	25,238	26,655	32,021	26.88
3	Anti-Sexual Harassment Program	18,100	18,673	29,755	64.39
4	Anti-Sexual Harassment Policy	18,538	19,479	29,755	60.51
5	Emergency Response Preparedness Program	21,855	24,249	28,346	29.70
6	Accident Prevention Program	19,676	22,098	27,712	40.84
7	Programs on Advocacy/Training/Information Dissemination for Promotion of Drug-free Workplace*	N/A	N/A	26,876	N/A
8	Program on Monitoring/Surveillance of Occupational and Work-related Injuries and Illnesses	17,767	20,494	26,104	46.92
9	Comprehensive Policy on Occupational Safety and Health (OSH)*	N/A	N/A	24,911	N/A
10	Policy on Confidentiality of Medical Information for Workers with Tuberculosis (TB)*	N/A	N/A	23,522	N/A
11	Tuberculosis (TB)	13,344	16,119	23,241	74.17
12	Program on the Promotion of Healthy Lifestyle	16,829	19,275	23,110	37.32
13	Policy on Confidentiality of Medical Information for Workers with Hepatitis B*	N/A	N/A	22,740	N/A
14	HIV Infection	12,065	14,692	22,518	86.64
15	Policy on Confidentiality of Medical Information for Workers with HIV Infection*	N/A	N/A	22,515	N/A
16	Hepatitis B	12,316	15,139	22,484	82.56
17	Programs on Advocacy/Training/Information Dissemination for Prevention and Control of TB*	N/A	N/A	22,464	N/A
18	Programs on Advocacy/Training/Information Dissemination for Prevention and Control of Hepatitis B Infection*	N/A	N/A	21,973	N/A
19	Program for Drug-free Workplace with the following element: Random drug-testing activities*	N/A	N/A	21,836	N/A
20	Programs on Advocacy/Training/Information Dissemination for Prevention and Control of HIV Infection*	N/A	N/A	21,834	N/A
21	Policy on Work Accommodation for Workers with Tuberculosis (TB)	N/A	N/A	21,485	N/A
22	Programs on Advocacy/Training/Information Dissemination for Promotion of Mental Health*	N/A	N/A	20,933	N/A
23	Policy on Confidentiality of Medical Information for Workers with Mental Health Condition*	N/A	N/A	20,734	N/A
24	IH Program*	N/A	N/A	20,688	N/A
25	Mental Health Condition*	N/A	N/A	20,572	N/A
26	Policy on Work Accommodation for Workers with Hepatitis B*	N/A	N/A	20,449	N/A
27	Policy on Work Accommodation for Workers with HIV Infection*	N/A	N/A	20,162	N/A
28	Policy on Work Accommodation for Workers with Mental Health Condition*	N/A	N/A	18,170	N/A
29	Program for the Promotion of Mental Health in the Workplace with the following Elements: Stress Management*	N/A	N/A	17,888	N/A
30	Program for Drug-free Workplace with the following Elements: Employee Assistance Program Related to Illicit Drug Use and/or other Substances of Abuse to Include Treatment, Rehabilitation and Referral Services	11,428	13,900	17,877	56.43
31	Program for Prevention and Control of Tuberculosis (TB) in the Workplace with the following Elements: Referral of Workers to Tuberculosis (TB) DOTS Facilities	N/A	N/A	17,645	N/A

Note: Data analyzed from PSA, ISLE 2015/2016, 2017/2018 and 2019/2020[4-6]

The counts pertain to number of establishments that implemented the said program/policy

**New categories in 2019*

***P*-Value**	0.00000004

Back pain, neck shoulder pain (NSP), and other WMSDs were the most commonly reported occupational diseases from 2015 to 2019. This usually presents in jobs with strenuous manual labor, prolonged sitting, and high-stress environment.[8] Superficial injuries and open wounds are still the most common occupational injuries recorded across industries.[8]

The Manufacturing industry, which employs a large portion of the workforce, is responsible for the majority of occupational injuries.[11] Hazards are common in this industry. Types of hazards that employees are subjected to are loud noise, chemical agents, airborne particles and gases, extremes of temperature, and vibration. These lead to a variety of injuries and accidents. The most common of which are overexertion injuries, electrocution, burns, slips, and falls.[2] A recent study analyzed 185 occupational injury cases in a selected food and beverage manufacturing company in the Philippines. The majority of the cases were caused by stepping on, striking against, or struck by objects, being caught in between, falls, and exposure or contact with extreme temperatures.[12]

In terms of percentage increase in occupational injuries, the administrative and support service activities sector topped the list. Since 2007, there has been a notable increase in the number of call center businesses all across the country. In 2018, the administrative and support service activities had a total of 8,471 establishments, representing a 21.4% increase from 2012. Call centers and other related activities took up the second largest portion with 14.9% in this industry.[13] With the rise of call centers in the Philippines, there was a notable increase in sleeping disorders, computer-related diseases, hearing, and voice problems. Employees usually suffer from back pain, occupational lung disease, occupational asthma, WMSDs, and neck-shoulder pain.[2] They suffer physically, mentally, and socially. There is a great need to shift attention to new emerging occupations, such as call center agents, and create new policies and programs tailored fit to their population.[14] In a study by Amit, Ultra, and Song, they found out that the majority of employees in this industry suffer from WMSDs and sleep disorders. Employees usually experience an alteration in their sleep-wake cycle to accommodate working hours in the Western region. Many of them also indulge in smoking and drinking.[15] Six out of 10 workers were found to have a history of smoking.[16] Their work also exposes them to different mental stressors like dealing with hostile customers and reaching target quotas.[17]

For Construction (F), Human Health and Social Work Activities (Q), and Arts, Entertainment, and Recreation (R), an increase of 42.4%, 46.9% and 34.2% in number of establishments was noted, respectively.[18] This may also explain the rising number of occupational injuries that was seen in the results even if the increase was found to not be statistically significant.

Occupational Safety and Health

The country's OSH framework comprise of the following: Occupational Safety and Health Center (OSHC), which deals with the preventive measures, Bureau of Working Conditions (BWC), which develops and updates OSH policies, DOLE Regional Offices, which ensures enforcement of OSH Standards, and Employees Compensation Commission (ECC), which deals with compensation and rehabilitation of employees.[2,19]

In 2018, Republic Act (RA) 11058: An Act Strengthening Compliance with Occupational Safety and Health Standards and Providing Penalties for Violations was signed into law and its implementing rules and regulations (IRR) was approved thereafter. This is an act that strengthens compliance with the OSHS and sets penalties for violations. Its coverage includes all private establishments and utilities engaged in air, sea, and land transportation. It also details the duties and rights of both the employer and the worker. Workplaces are categorized into risk levels caused by the nature of businesses, and this is done by a company safety officer (SO).[20] There were numerous revisions, particularly in the OSH programs and policies implemented in companies. A DOLE-prescribed format is followed and revised to customize to the institution's needs. The OSH programs are reviewed annually.[20] Aside from programs and policies, workers are required to undergo training and seminars that are deemed to be vital to their occupations. Incentives and violations were also implemented.[2]

As seen in the results of this study, there was a significant change in both the preventive and control measures and OSH programs and policies enacted in companies. There is an evident transition from hazard-based programs to a more holistic approach to OSH, wherein even mental health and other non-communicable diseases are dealt with. Generally, there has been an increase in the utilization of OSH programs and measures over the years as seen in Table 5. However, there is still a need to address the issues in the delivery of OSH programs across the Philippines.

In 2018, before the implementation of RA 11058, a study by Hernandez and Saquido identified the most important gaps: lack of lead agency; lack of OSH mandate awareness; lack of clear delineation of roles and responsibilities among stakeholders; poor coordination among government agencies; and poor enforcement of legislation. DOLE is the governing agency in terms of OSH, but it carries other responsibilities as well. Since no specific stakeholder was fully dedicated to OSH functions, they proposed one that will handle OSH-related matters only. Emphasizing mandates and legislation increases awareness of OSH leading to productivity and economic sustainability. Likewise, definite roles and proper coordination must be set among stakeholders for better implementation of policies and to ensure that all processes are working efficiently.[21] Lastly, due to the poor execution of OSH mandates in the country, stakeholders must address previous gaps identified and learn from successful legislation from other countries, such as imposing obligations and penalties if a company is not compliant with OSHS, which is being addressed by RA 11058.

Scope and Limitations of the Study

The study has certain limitations that must be acknowledged. The use of ISLE data limits the variables measured to those only gathered in the said national survey; hence, it potentially omits other relevant factors that were not captured in the survey. There are also potential biases in the data collection process of the ISLE which may lead to inaccuracies or inconsistencies due to non-response, recall bias, or reporting errors by respondents. Despite being effective in identification of trends and priority issues, the use of descriptive and Pareto analyses may introduce a level of subjectivity in the interpretation of results and selection of key variables for analysis. Less prominent but still important issues may be overlooked. These limitations suggest that the results should be interpreted with caution and further research may be needed to address these potential biases and gaps.

CONCLUSION

Occupational safety and health (OSH) is crucial for the workforce in the Philippines. This study provides a detailed overview of the current OSH landscape, highlighting a general decline in occupational injuries and diseases over the years. Although the types of common occupational injuries have varied, the changes have not been substantial. Similarly, the incidence of occupational diseases has shown a steady decrease. The implementation of OSH measures and policies has notably increased since the enactment of RA 11058 in 2018, reflecting significant progress in safety practices. Despite these advancements, existing gaps in preventive measures, control activities, and policy enforcement need to be addressed to fully enhance workplace safety and health across the country.

Recommendations

To enhance occupational safety and health (OSH) in the Philippines, a review incorporating recent ISLE data from 2021/2022 is essential. This will provide updated insights into current trends and assess the impact of recent OSH measures. Evaluating the effectiveness of RA 11058, introduced in 2018, is crucial to determine if policy changes have effectively improved safety outcomes. Addressing existing gaps in OSH measures and programs should be prioritized, including strengthening training, enforcement, and data collection. Continuous monitoring of occupational injuries and diseases, alongside support for research and development of innovative OSH practices, will further advance workplace safety.

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Statement of Authorship

All authors certified fulfillment of ICMJE authorship criteria.

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REFERENCES

1. International Labour Organization. Safety and Health at the Heart of the Future of Work: Building on 100 years of experience [Internet]. 2019 [cited 2023 Aug]. Available from: https://www.ilo.org/safework/events/safeday/WCMS_686645/lang--en/index.htm
2. Lu JL. State and trends of occupational health and safety in the Philippines. Acta Med Philipp. 2022; 56(1):59–72. doi: 10.47895/amp.v56i1.3865.
3. Harel Z, Silver SA, McQuillan RF, Weizman AV, Thomas A, Chertow GM, et al. How to Diagnose Solutions to a Quality of Care Problem. Clin J Am Soc Nephrol. 2016 May;11(5):901-907. doi: 10.2215/CJN.11481015. PMID: 27016495; PMCID: PMC4858489.
4. Philippine Statistics Authority. Integrated Survey on Labor and Employment 2015/2016. Philippines: Philippine Statistics Authority. 2016.
5. Philippine Statistics Authority. Integrated Survey on Labor and Employment 2017/2018. Philippines: Philippine Statistics Authority. 2018.
6. Philippine Statistics Authority. Integrated Survey on Labor and Employment 20190/2020. Philippines: Philippine Statistics Authority. 2020.
7. Philippine Statistics Authority. 2012 Philippine Standard Occupational Classification (PSOC) [Internet]. 2012 [cited 2023 Mar 11]. Available from: https://psa.gov.ph/classification/psoc/technical-notes
8. Lu JL. Statistics on trends of occupational injury and related injuries in the Philippines. Acta Med Philipp. 2021;55(6):604-15. doi: 10.47895/amp.v55i6.3328.
9. Tadesse S, Israel D. Occupational injuries among building construction workers in Addis Ababa, Ethiopia. J Occup Med Toxicol. 2016 Apr 11;11:16. doi: 10.1186/s12995-016-0107-8. PMID: 27069499; PMCID: PMC4827174.
10. Beck M. The risk implications of globalisation: an exploratory analysis of 105 major industrial incidents (1971-2010). Int J Environ Res Public Health. 2016 Mar 10;13(3):309. doi: 10.3390/ijerph13030309. PMID: 26978378; PMCID: PMC4808972.
11. Health and Safety Authority. Annual Review of Workplace Injuries, Illnesses and Fatalities 2020–2022. Ireland: Health and Safety Authority. 2022.
12. Yee LH, AL-Rejal H. Occupational Safety and Health Practices in the Manufacturing Industry. Proceedings of Symposium on Technology Management & Logistics. 2016 Dec;782-92.

13. Prasetyo YT, Garcia MM, Dewi RS, Chuenyindee T, Kurata YB, Widia M. Accident patterns and prevention measures for occupational injuries in the Philippine food and beverage manufacturing industry. Work. 2022; 73(4):1307-24. doi: 10.3233/WOR-210662. PMID: 36057804.
14. Philippine Statistics Authority. 2018 Census of Philippine Business Industry: Administrative and Support Service Activities [Internet]. 2021 January 13 [cited 2023 Mar 11]. Available from: https://psa.gov.ph/content/2018-census-philippine-business-and-industry-administrative-and-support-service-activities-0
15. Raja JD, Bhasin SK. Health issues amongst call center employees, an emerging occupational group in India. Indian J Community Med. 2014 Jul;39(3):175-7. doi: 10.4103/0970-0218.137156. PMID: 25136159; PMCID: PMC4134534.
16. Amit L, Ultra V, and Song Y. Predictors of Occupational Health Outcomes of Call Center Workers from Selected Companies in Cebu and Manila. Phillipp J. Sci. 2020; 149(4): 1189-1199.
17. University of the Philippines Diliman Population Institute, International Labor Office. Lifestyle, health status and behavior of young workers in call centers and other industries: Metro Manila and Metro Cebu [Final Report]. Commission on Population. 12 March 2010.103.
18. Philippine Statistics Authority. 2018 Census of Philippine Business Industry: Arts, Entertainment, and Recreation [Internet]. 2021 January 13 [cited 2023 Mar 11]. Available from: https://psa.gov.ph/content/2018-census-philippine-business-and-industry-arts-entertainment-and-recreation
19. Occupational Safety and Health Center, Department of Labor and Employment. Occupational safety and health standards as amended. Intramuros, Manila Occupational Safety and Health Center, Department of Labor and Employment. 2016.
20. Bureau of Working Conditions, Department of Labor and Employment. Key Points of Republic Act (RA) No. 11058 [Internet]. N.D. [cited 2023 Mar 11]. Available from: https://bwc.dole.gov.ph/images/Buttons/Newbuttons/OSHUpdates/KeyPoints_DO198s18.pdf
21. Hernandez PM, Saquido AS. Analysis of gaps among stakeholders of occupational health and safety in the Philippines. Acta Med Philipp. 2018;52(3):281-7. doi: 10.47895/amp.v52i3.415.