

Occupational Hazards among Resort Hotel Workers in District IV of Batangas, Philippines

**Russell James O. Mendoza, Daniella A. Habibi,
Crisanta Iris Dei B. Hiwatig, Sheina Marie R. Macalalad,
John Patrick C. Malibiran, Levi Keach M. Tolentino and
Jeninah Christia B. Pulhin**

College of International Tourism and Hospitality Management
Lyceum of the Philippines University, Batangas City, Philippines

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Abstract –*This study aimed to assess the occupational hazards among employees of selected resorts in District IV of Batangas Province. The study made use of descriptive method and utilized an adapted questionnaire which was distributed among 190 employees of the selected resort hotel in District IV Batangas province. Statistical tools used were percentage and frequency distribution, weighted mean and analysis of variance to interpret the results. Majority of the respondents were 30-39 years old, males, have been working in the resort for 4 – 6 years as room attendant. The respondents often experienced occupational hazards in relation to biological, physical, ergonomic and psychosocial. Employees of ages 18 to 29 years old, males, working for 4-6 years and working in rooms as attendant have encountered more hazards. It was found out that those working for 10 years and above have encountered more hazards in terms of ergonomic and physical aspect. Those who belong to other section (receptionist) encountered more hazards in terms of ergonomic.*

Keywords: *Occupational Hazards, Ergonomic Hazards, Physical Hazards, Biological Hazards, Psychosocial Hazard*

INTRODUCTION

The hospitality industry intends to hire people who are skillful in the services provided by the hotels, restaurant and other food products establishment. Service has been one of the emerging concepts of hospitality industry which acquired so much attention for the last decade. The idea of good service was gained due to the interrelationship that exists between the service provider and consumer during transaction. It can contribute to the experiences of the customers aside from the services they are consuming. However, provision of services can create an environment for the workers that make them associated with hazard and danger. In hotel and resort sector, most type of

hazards is their musculoskeletal injuries such as pain at their back, elbows, muscles, and knees. The causes of these hazards are the repetitive movement and the wrong association with proper body mechanics while providing services to the customers [1].

This kind of danger that the employees and workers are currently facing is an occupational hazard. By definition, it means that the work environment and kind of services can increase danger to the employees at minimal to maximum risk assessment. There are different of hazards that are present in the hospitality industry including the physical chemical, biological, psychosocial and physical hazards [2].

Hazards are present in the hospitality industry that could affect the operation of the business. The hazards that is commonly found in this industry is found in service providers such as hotels or resorts and even food and beverage services. The hospitality management must make sure that their employees will be able to cope with the presence of hazards by alleviating it with safety programs [3].

In resorts, the hazards are very crucial since they are dealing with nature and environment such as beaches and the activities related to water activities. They need to provide coast guards and divers to maintain the safety and security of their customers. But what is not known to them is that employees themselves are faced with danger as they provide services to their customers.

This study aims to assess the occupational hazards among Resort Hotel workers in District IV of Batangas Province. The study will help to identify the extent of occupational hazards that is present in their premises. The results of the study will help them to make alterations with existing process to reduce the hazards experience by both staff and customers. Also, the resorts industry will be able to use the study as a basis for further development of resort industry in

relation to occupational and safety hazards of the resort work environment. The study will make the employees of the resorts to be aware of the potential hazards that will affect them in the future. The College of International Tourism and Hospitality Management may use this study to identify such hazards and to equip the students with the knowledge about such concepts to improve the competitiveness of the learners. Furthermore, the researchers may be able to use their knowledge in analyzing the occupational hazards in hospitality industry and may provide recommendations and programs to lessen the risk of such hazards to the wellbeing of hospitality workers and the future researchers.

OBJECTIVES OF THE STUDY

This study aimed to assess the occupational hazards among employees of selected resorts in District IV of Batangas Province. Specifically it aimed to describe the profile of the respondents in terms of their age, sex, length of service, and section; assess the occupational hazards in terms of ergonomic hazards, physical hazards, biological hazards and psycho-socio hazards; test the significant difference on the impact of occupational hazards when grouped according to their profile variables; and propose a plan of action based on the result of the study.

METHODS

Research Design

The study made use of descriptive method of research to assess the occupational hazards among employees in selected resorts in district IV of Batangas province. The descriptive method with evaluative findings of research was used by the researchers in this study which was defined as valuable in fact finding procedure that allow scholars to gain scientific evidences to support a problem identified in a specific time frame. Comparative design examines several intact groups to find out the difference among them in certain dependent variable of interests [4].

Participants of the Study

The participants of the study were regular and part-time resort hotel employees in Housekeeping Department of selected resorts in district IV of Batangas province with the total of 190 employees based on an effect size of 0.32, a probability of 0.95 an alpha level of 0.005 using G* Power 3.1.9.

Instrument

The instrument is a research-made questionnaire composed of two (2) parts: first is profile of the respondents in terms of age, sex, length of service and section assigned; second part is for assessment of occupational hazards. The instrument was tested for reliability and it obtained a Cronbach's alpha value of 0.0846 which means that the instrument has a good internal consistency. To interpret the results, the following Likert scale was used: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 – 1.49 = Never

Procedure

After the approval of the researchers' topic which were about the occupational hazards among resorts employees in district IV of Batangas province the researcher started reading different books, journals, and theses in different libraries and research for the study. Through extensive reading, the researchers were able to gather enough literature and studies that served as a good source related to topic. The gathered information helped support their study and started working on the paper.

Since the questionnaire is partially modified, before the distribution of questionnaire it was validated by experts in occupational hazards and underwent reliability test.

The questionnaire was distributed personally by the researcher among the respondents and gave them ample time to answer the questionnaire. The researchers got the 100 percent respondents among the selected resort hotel in District IV Batangas province and it was all answered by Resort hotel employees. The collected questionnaires were tallied by the researchers and the results were given to the University's Statistician and analyze and interpret the tables.

Data analysis

The gathered data were tallied and interpreted using the following tools. Percentage and Frequency distribution identified the profile of the respondents in terms of their age, sex, length of service, and department.

Weighted Mean distribution and ranking were used to assess the occupational hazards in terms of ergonomic hazards, physical hazards, biological hazards and psycho-socio hazards

Analysis of Variance or ANOVA was used to test the significant difference on the assessment of the impact of occupational hazards on employees' performance when grouped according to their profile variables.

Ethical Consideration

The researchers observed several ethical considerations while conducting this study. This is to ensure that their participants are fully respected and protected while participating in the study. The researchers did not ask for personal identification of the respondents to secure their anonymity. The researchers guided the participants in answering the questionnaire and used Filipino language to make the information well understood. In addition to this, the gathered information was treated only for the benefit of this study.

RESULTS AND DISCUSSION

Table 1. Frequency and Percentage Distribution of the Respondent's Profile

Profile Variables	Frequency	Percentage (%)
Age		
18 – 29 years old	53	27.90
30 – 39 years old	107	56.30
40 – 49 years old	26	13.70
50 years old and above	4	2.10
Sex		
Male	133	70.00
Female	57	30.00
Length of Service		
below 1 year	16	8.40
1 – 3 years	53	27.90
4 – 6 years	74	38.90
7 – 9 years	31	16.30
10 years and above	16	8.40
Sections		
Room Attendant	101	53.20
Public Area	48	25.30
Pool Attendant	40	21.10
Other	1	.50

Table 1 presents the profile of the respondents in terms of age, sex, length of service and sections. In terms of their age, majority of the respondents belong to the age bracket of 30 – 39 years old which got the highest frequency of 107 or 56.30 percent, followed by 18 – 29 years old with 53 or 27.90 percent and 40 – 49 years old with 26 or 13.70 percent and the least is

50 years old and above with lowest frequency of 4 or 2.10 percent.

This means that those working in resorts are young adult who are physically fit to provide customer service related to resort industry and were matured to handle this kind of industry. There is lot work needed to accomplish in maintaining resorts while providing services to the needs of the guests since resorts are providing accommodation too. So, the management must hire people who are strong enough to be able to cope with the changing demand of the customers visiting resorts.

Hospitality industry is becoming aware of the importance of hiring young people to provide services since they are the healthiest age group that would be an asset for the company. The management would not prefer to hire too old employees and too young personnel because they could be more of liabilities than an asset to the business. Since too old and too young employees are more prone to occupational hazards [5].

With regard to their sex, majority of the respondents are males with higher frequency of 133 or 70.00 percent while females got only 57 or 30.00 percent. This shows that most of those being hired by the resorts are male since they could provide the needed services of customers coming to resorts for vacation. There is wide array of services provided by resorts that needs physical strength of their manpower, so it is wiser to hire more males compared to women.

In the article of Chauhan et al. [5] shows support in the trend of companies hiring males compared to females. This has been addressed as gender inequality in the workplace. But for the management, it is wise to hire males because their work is heavier than the work of females. However, that does not mean that the company would not need women in the operation, only that male counterpart has more strength that they could perform extra jobs such as lifting and pushing heavy materials and other field work that led to ergonomic hazards.

The profile length of service shows that majority of the respondents have been working in the resorts for 4 – 6 years which got the highest frequency of 74 or 38.90 percent followed by 1 – 3 years with 53 or 27.90 percent and 7 – 9 years with 31 or 16.30 percent and the least are those working below 1 year and 10 years and above with 16 or 8.40 percent.

This implies that the respondents have been working in the resorts for 4-6 years which means that they are contented with their kind of work and may be

compensated enough to stay in this kind of work. Working long time in a work environment can make the employees be accustomed to their job roles that make it easier for them function every day.

The longer the employee stayed in a work environment would mean that they are accustomed to it and were enjoying all aspect of their roles. The employees are satisfied with their role and compensation, so they decided to stay in a company and were able to demonstrate their skill [7].

Lastly, with regards to sections, it shows that majority are designated in the area for room attendant which got the highest frequency of 101 or 53.20 percent, followed by public area with 48 or 25.30 percent, and pool attendant with 40 or 21.10 percent and other area got the frequency of 1 or 0.50 percent.

In resorts, most of the tasks needed to be accomplished are those for room attendant and since most of the respondents are in this area, it means that they are facing hazards that were found in the rooms and accommodation of the business.

Hospitality business is more on the accommodation services, their hired personnel are in advantage when they specialized in room services and accommodation maintenance. The resort industry is also changing its perspective to provide more service-related accommodation and not just only for the presence of beach and water-based activities [8].

Table 2. Occupational Hazards in terms of Ergonomic Hazards

Indicators	WM	VI	Rank
1. I clean more than 16 rooms daily.	2.53	Often	5
2. I experience back and shoulder pains after performing my task.	3.04	Often	1.5
3. When rushing to clean slippery tub or lift a heavy mattress, I get hurt.	2.73	Often	4
4. Housekeepers strained their lower back while pushing a queen-sized bed.	2.82	Often	3
5. Housekeepers are exposed to potent industrial cleaning materials.	3.04	Often	1.5
Composite Mean	2.83	Often	

Table 2 presents the assessment on occupational hazards in terms of ergonomic. The composite mean of 2.83 indicates that the respondents often experienced the hazards.

This means that the respondents are experiencing ergonomic hazards based on their responses seen in the table. This is because of their repetitive movements since they usually offer the same services to their customers. When the staff are doing repetitive tasks, musculoskeletal will be affected. Also, some workers are doing sedentary work like wrong posture while sitting for long hours and walking in slippery places due to the presence of water may affect their body.

Ergonomic hazards surfaced when the employees' job roles and task as well as the working environment can endanger the physical structure of the person. What is wrong with ergonomic hazards is that this is not usually noticed since it slowly affects the musculoskeletal aspect of the worker. Eventually, the workers will experience deterioration of their physical structure by repetitive work and dealing with hazardous environment [9].

The table shows that the respondents often experience back and shoulder pains after performing their task, and housekeepers are exposed to potent industrial cleaning materials which got the highest weighted mean of 3.04 followed by housekeepers strained their lower back while pushing a queen-sized bed with 2.82.

The respondents often experience back and shoulder pain because of their movements where they are unable to practice proper body mechanics due to insufficient knowledge about it. The same services lead to repetitive movement that strain their muscles and musculoskeletal that causes pain in the shoulder and back area. When the staff experience pain, it could affect their productivity and performance at work. They will not be able to cater the needs of their customers when they themselves are experiencing pain in the body. This may also lead to absenteeism, tardiness and being unproductive.

Study found out [9], that to prevent musculoskeletal problems is to reduce the repetitive movements done by the workers. However, it is found to be barriers since such movements are needed to be repeated to be able to finish different task as part of the operation of the business. Consequently, make the workers feel pains in certain parts of their bodies.

On the other hand, when rushing to clean slippery tub or lift a heavy mattress, they get hurt with 2.73 and verbal interpreted as often. Moreover, the least is they clean more than 16 rooms daily with lowest mean of 2.53 and verbal interpreted as often.

The respondents often experience cleaning more than 16 rooms, which is considered ergonomic hazards since it can make them very tired in the process. Cleaning rooms is very exhausting because the resort employees deal with different customers and their wastes, which became hazards to the resort staffs.

Cleaning rooms can be very hazardous to the staff because of the tiredness they will feel, especially when they need to work more than 8 hours without half or full rest in the process. Physical exhaustion can lead to health deficiency and pain in musculoskeletal body parts [10].

Table 3. Occupational Hazards in terms of Physical Hazards

Indicators	WM	VI	Rank
1. Manual handling and falls are very common in housekeeping job.	2.98	Often	1
2. Poorly maintained or designed equipment vibrate too much.	2.74	Often	4
3. Use of vacuum cleaner impaired hearing.	2.79	Often	3
4. Falls, slips and trips can be caused by such features as electric tables and unclean floor surfaces.	2.91	Often	2
Composite Mean	2.85	Often	

Table 3 presents the assessment on occupational hazards in terms of physical. The composite mean of 2.85 indicates that the respondents often experienced the hazards. This means that the respondents are often experiencing physical hazards that are obvious, but the employees cannot reduce the risk of its presence and can only alter their activities to reduce the manifestation of such hazards. Physical hazards are often present in the premises of resorts due to the presence of water which made the floors and places slippery such as bathrooms and rooms. The housekeeping department are making sure that all parts of the resorts should be well kept and dry, but it is hard to do so when there are so many customers. The hazards at time greatly depend on the design of the resort.

Physical hazards tend to be obvious since the danger can affect the physiological aspect of the employees. Although not all physical hazards are seen by the naked eyes, it still has impact to the health and body, especially when accident and injuries occurs

[11]. Hazards related to physical aspect can also be part of the intrinsic properties of the present chemicals in the workplace. For example, physical hazards can be attributed to the flammable ingredients, explosive devices, oxides and corrosive materials that may explode and can cause accidents to the employees. They are considered to be physical hazards since they can cause accidents or health deficits to the people exposed to it.

It shows that the respondents' often-manual handling and falls are very common in housekeeping job which got the highest weighted mean of 2.98 followed by falls, slips and trips can be caused by such features as electric tables and unclean floor surfaces with 2.91.

One of the most difficult experiences of the respondents are doing manual work and the presence of place where they could fall due to the swimming pools, seaside pools, beaches and inland. These main features are needed by resorts to encourage tourists to visit them; however, it can cause accidents because the person might slip and fall in the resorts.

The presence of hazards in the physical structures of any accommodation can be a risk factor that could affect the safety of staffs and customers. The management must assure they have good design for their accommodation to reduce the risk for accidents. Also, they help their staff to have lower hazards so that there will be no delays in the operation of the business [4].

However, the use of vacuum cleaner impaired hearing with weighted mean of 2.79 and verbal interpreted as often.

The respondents often experience using equipment that is poorly maintained and vibrate too much because the machineries are needed for the operation of resorts like swimming pools and water treatment. The machines for a time will depreciate due to being old and over used which could lead to hazards among staff and customers. The management must make sure that all machineries and equipment's are fairly maintained so that there will be smooth operation and low risk for hazards. When the machines are already broken and were used by the staff, accident can happen too. This is quite dangerous not only for staff but also the customers of the resorts.

Resorts used different equipment to make it easy for workers to do their tasks. This requires the applicants of resort to be knowledgeable with regard to how this equipment would work. Though the noise could be very hazardous, the resort management must

cope with the demand of customers preferred services in using equipment and machineries [12].

The least is poorly maintained, or designed equipment vibrates too much with lowest mean of 2.74 and verbal interpreted as often. The respondents often experience using equipment that is not well maintained and vibrate too much because the machineries are needed for the operation of resorts like swimming pools and water treatment. Housekeeper use different equipment in their daily work they are more prone to hazards than other resort employees. Example of this equipment vacuum cleaner if it is not well cleaned by the housekeeper it will vibrate too much. Proper cleaning of equipment and machineries must be done to protect not just the staff but also the guest.

The maintenance of equipment and machine are important to maintain the safety of the work place, especially those mostly operated by machines. It is part of the expenditure of the company to maintain their supplies and machineries for proper handling and for the efficient operation of the business [13].

Table 4. Assessment of Occupational Hazards in terms of Biological Hazards

Indicators	WM	VI	Rank
1. Body fluids are hazardous to housekeepers	3.04	Often	2
2. Stained bed linen is hazardous	2.86	Often	3
3. Sharp objects causes injuries.	3.10	Often	1
Composite Mean	3.00	Often	

Table 4 presents the assessment on occupational hazards in terms of biologic. The composite mean of 3.00 indicates that the respondents often experienced the hazards. This means that the respondents often experience biological hazards due to the presence of living organism that could affect the health of the staff such as bacterium and viruses acquired from land and water. Biological hazards are usually caused of acquired illness and communicable disease coming from other person and transferred to another. The living organisms are not being seen by naked eyes and would eventually be transferred without the knowledge of the person. When a staff is carrying viruses, it could lead to more problems in health and may be transferred to other workers that could affect the overall operation of the resorts.

Biological hazards are directly linked to the hazards that are found in living organisms or

sometimes called biohazards. These biological substances tend to threat the health of the employees since they are one of the highest forms of living organism. Such organism is considered to be toxin since it needs a host for it to survive so when the living organism acquires a human host, it will not leave and acquire life support and supply from their chosen host [8].

Table 4 shows that the respondents often experience injuries case by sharp objects, which got the highest weighted mean of 3.10 followed by body fluids, are hazardous to housekeepers with weighted mean of 3.04.

This means that they often experience being injured by sharp objects from the designs of swimming pools, bathrooms and other amenities of the resorts. When such objects make lacerations to the skin, then the person is prone for bacteria, viruses and foreign bodies that could infect the body.

One of the occupational hazards experienced by most workers are the presence of sharp objects. It is defined as hollow objects, which could puncture wounds and lacerations to the skin of a person. The injuries can lead to more complicated health problems when it is not alleviated because the opening of the skin can encourage hazardous organism to infect the body [14].

While the least is stained bed linen is hazardous with lowest mean of 2.86 and verbal interpreted as often. It means that the respondents experienced stained bed linen as hazardous materials because of the waste produced by the customers and guests who stayed at the resort accommodation. Human are technically carriers of viruses and bacteria that could be transmitted through droplet or air transmission.

When a person is exposed to different biological considered hazards in their work environment, their health will be affected in the future which in turn would lead to lower productivity. The essential contact of people exposed to biological hazards is those working in laboratories where cell cultures, soil, crimes, DNAs and liquids are present [15].

Table 5 presents the assessment on occupational hazards in terms of psychosocial. The composite mean of 2.75 indicates that the respondents often experienced the hazards. Psychosocial hazards include the stress and social problems that the workers faced which could affect them in the future. Man is a natural socializing wellbeing who is commonly influencing others through behavior and personality.

Table 5. Assessment of Occupational Hazards in terms of Psychosocial Hazards

Indicators	WM	VI	Rank
1. Customer always demand for a quick service delivery	3.12	Often	1
2. There is no break or lunch time	2.40	Sometimes	4
3. Working hours are intensive	2.95	Often	2
4. Housekeepers are not well compensated.	2.53	Often	3
Composite Mean	2.75	Often	

The relationship build with one another is based on their mutual understanding of the needs of one another and cope with what other is externally manifesting their thoughts. Further, culture and social norms became a standard in developing social relationships such as child who initially accepts and behaves in traditional way due to his exposure to parents, relatives and careers and eventually adapt to the changes and culturally accepted behavior [16].

It shows that the respondents often experienced having customer always demand for a quick service delivery which got the highest weighted mean of 3.12 followed by working hours are intensive with weighted mean of 2.95. This implies that the respondents are experiencing customers' demand that lead to fatigue because at times, some request were out of their scope of work and would need to exert more effort in order to provide the needs of the customers.

Fatigue can harm the employees since it can create anxiety and stressors that could lower their productivity. When the person is experiencing fatigue, it will not only affect their bodies, but also their psychological aspect since they are being stressed out by not being able to rest. This occurs among hospitality personnel when they are working long hours without rest or filling in with other employees who are absent. To address such, a management tool may be used such as emotional disharmony and coping strategies to lowers the stress being felt by the employees [17].

On the other hand, housekeepers are not well compensated with weighted mean of 2.53 and verbal interpreted as often. This implies that the housekeepers often experience being not well compensated because resorts usually are in high demand during peak season and cannot afford to compensate their employees when there are no

customers visiting the resort. This happens especially during cold season or rainy season; however, they still need to maintain the resort, so they need reduce their staff to be able to sustain in the business.

When the management has low income, they need to reduce number of process and services to be able to maintain their cash flows and revenues. Staff reduction and recession often occurs when there is no income at all [2].

The least is there is no break or lunch time with lowest mean of 2.40 and verbal interpreted as often. The respondents often experience no break and lunch when there are many customers that need to be assisted. The staff needs to accommodate first the customers before they attend to their own needs. Also, even there are shifting schedules so other employees could take break while some are assisting the guests, at times there will be no break at all.

Shifting schedules are important for the employees to take turns for their breaks and lunch time. However, there are times that this may not happen when there are so many tasks to do [3].

Table 6. Summary Table on the Assessment of Occupational Hazards

Indicators	Weighted Mean	Verbal Interpretation	Rank
Ergonomic Hazards	2.83	Often	3
Physical Hazards	2.85	Often	2
Biological hazards	3.00	Often	1
Psychosocial Hazards	2.75	Often	4
Composite Mean	2.86	Often	

Table 6 presents the summary table of the assessment on occupational hazards. The composite mean of 2.86 indicates that the respondents often experienced the hazards. Among the variables, Biological hazards obtained the highest weighted mean of 3.00, followed by Physical Hazards with 2.85 and verbal interpreted as often.

This means that most of the resort workers are experiencing biological hazards, which are present specifically in the guestrooms. Examples of these hazards are stained or soiled bed linens. Room attendants are always exposed to this microorganisms or bacteria that are present in the soiled linens. Biological hazards are also present in outdoor facilities like swimming pool, some guests especially children can't avoid to urinate in the swimming which makes it hazardous to other guests.

The risk for biological hazards can create high number of incidences among the workers that directly affects their health and create more complex health deficiency. One example for high risk biological hazardous environment is the healthcare setting where the nurses are exposed to patients with serious health cases and communicable disease. The hazards can be acquired from liquid, blood, saliva, mucous, feces and urines which can be transported to the nurses during patient care [18].

However, the variable Ergonomic Hazards got 2.83 while the least is Psychosocial Hazards with lowest mean of 2.75 and verbal interpreted as often. A psychosocial hazard is any danger that may affect the psychological aspect of a person working in any industry. This can lower their performances since they will not be able to think that likely useful in participation in any activities that the work environment needs. This hazard is not given importance because most people do not know the effect of this kind of hazard. Resort workers do not know that by just quick demand of services, they are experiencing this kind of hazard.

The social development of people is about their ability to understand and learn the common values, cultures, traditions and norms in a work environment. Their knowledge can create relationship among others that can increase their abilities to positively adapt to the environment. When a child is learning, it is acquired from people who have direct contact with them such as careers and parents. These people tend to initiate learning and teaching as they imposed it to children on what is right and what is wrong. When parents teach children to fear authoritative people, they will think of them as monsters while when they are being taught that big people are good, they will behave positively [14].

Table 7. Difference of Responses on Assessment of Occupational Hazards When Grouped According to Age

	F-value	p-value	Interpretation
Ergonomic Hazards	5.019	0.002	Significant
Physical Hazards	1.295	0.277	Not Significant
Biological hazards	2.337	0.075	Not Significant
Psychosocial Hazards	2.439	0.066	Not Significant

Legend: Significant at p-value < 0.05

Table 7 presents the comparison of responses on occupational hazards when grouped according to age. It was observed that there was a significant difference on ergonomic hazards since the obtained p-value of

0.002 was less than 0.05 alpha level. This means that the responses differ significantly and based from the post hoc test conducted, it was found out that ages 18 to 29 years old encountered more hazards in terms of ergonomic. This is because the young people are used to sedentary live and working or more physical activities to be done are considered to be ergonomic hazards for them. They are new to the workplace and they didn't know this kind of hazard. Just by repetition of their movement especially in the house keeping department, there are many employees who belong to this age who carry heavy equipment and are always having improper posture in cleaning the bathroom. This way, they will experience this kind of hazard.

This is supported by the study of Siaw [4], who found out that there is significant difference on the responses on hazards when it is grouped to the age of the respondents. The difference was due to different level of maturity and experiences of the respondents based on how old they are. Older people know how to perceive and acknowledge risks and they are more alert or cautious than the younger people. Younger people act without considering the result of their actions. They don't have a conscious view in terms of the value and benefits of their actions.

Table 8. Difference of Responses on Assessment of Occupational Hazards When Grouped According to Sex

	t-value	p-value	Interpretation
Ergonomic Hazards	3.010	0.003	Significant
Physical Hazards	2.052	0.042	Significant
Biological hazards	1.760	0.080	Not Significant
Psychosocial Hazards	0.226	0.821	Not Significant

Legend: Significant at p-value < 0.05

Table 8 shows the comparison of responses on occupational hazards when grouped according to sex. It was observed that there was a significant difference on ergonomic hazards (p-value = 0.003) and physical hazards (p-value = 0.042) since the obtained p-values were less than 0.05 alpha level. This means that the responses differ significantly and based from the post hoc test conducted, it was found out that male encountered more hazards in terms of ergonomic and physical. The hazards were more encountered by males since they are the one who do most of the physical activities like carrying equipment and lifting heavy materials. These hazards are connected with each other because of improper carrying of heavy equipment, which is a part of the job of the male

housekeepers. Improper lifting of heavy materials like bed mattress which all housekeepers are always doing because repetition of movement can cause ergonomics hazard. Most of male employees are cleaning bathroom falls and slips are present their especially if they do not have proper attire and equipment.

Males are usually prone to hazards because they are usually designated to heavy tasks since they are physiologically stronger compared to women. Employed males have more physically demanding tasks than females. Male sometimes doesn't need support and has higher job status. They are also more expose in heavy works and worked longer hours than women [10].

Table 9. Difference of Responses on Assessment of Occupational Hazards When Grouped According to Length of Service

	F-value	p-value	Interpretation
Ergonomic Hazards	2.688	0.033	Significant
Physical Hazards	2.476	0.046	Significant
Biological hazards	2.350	0.056	Not Significant
Psychosocial Hazards	0.595	0.667	Not Significant

Legend: Significant at $p\text{-value} < 0.05$

Table 9 shows the comparison of responses on occupational hazards when grouped according to length of service. It was observed that there was a significant difference on ergonomic hazards ($p\text{-value} = 0.033$) and physical hazards ($p\text{-value} = 0.046$) since the obtained $p\text{-values}$ were less than 0.05 alpha level.

This means that the responses differ significantly and based from the post hoc test conducted, it was found out that working for 10 years and above encountered more hazards in terms of ergonomic and physical hazards. Since these employees have been working for so long in a resort and were accustomed to the repetitive task like lifting heavy mattress and carrying heavy equipment, they are more conscious of how ergonomic hazards might affect them. Some of employees who work for a long period of time intend to disobey the safety precautions and standards of the resorts. Improper cleaning of guest room especially the bathroom will surely result to physical hazards like falls and slips.

According to Lee et al. [19], the longer that a person stays in a job, the more he is prone to ergonomic and physical hazards because of the repetitive task they need to perform. Male employees are also more prone to hazard is due to the neglect of the establishment's given standards for safety. These male employees who have had longer length of

service in their workplace may be more self- assertive and arrogant since they are confident that the daily tasks assigned to them may not harm them therefore leading to less requirement of attention for safety tend to be more prone to ergonomic and physical hazards.

Table 10 disposed the comparison of responses on occupational hazards when grouped according to sections. It was observed that there was a significant difference on ergonomic hazards since the obtained $p\text{-value}$ of 0.002 was less than 0.05 alpha level.

This means that the responses differ significantly and based from the post hoc test conducted, it was found out that those who belong to other section (receptionist) encountered more hazards in terms of ergonomic. This associates that the receptionists are usually sitting and have no other activities to do.

Table 10. Difference of Responses on Assessment of Occupational Hazards When Grouped According to Sections

	F-value	p-value	Interpretation
Ergonomic Hazards	5.042	0.002	Significant
Physical Hazards	0.961	0.412	Not Significant
Biological hazards	1.019	0.386	Not Significant
Psychosocial Hazards	0.742	0.528	Not Significant

Legend: Significant at $p\text{-value} < 0.05$

The poor posture can lead to a more complex health problem in relation to musculoskeletal problems. The seating and work table must be based on the ergonomic standards to reduce the stress being felt by the body as the person does their task. Hazards can decrease productivity among the personnel. One important factor is the alignment of back and spine when the person has poor posture while sitting and standing [20]. The adjustment can be done to the seat and it should be designed based on the standard height and weight as well as it should have the ability to adjust based on the length of the body of the users. Such adjustment can be moving the seat up and down or forward and backward so that it can fit the person sitting on it [19].

CONCLUSION

Majority of the respondents were 30-39 years old, males, have been working in the resort for 4 – 6 years as room attendant. The respondents often experienced occupational hazards in relation to biological, physical, ergonomic and psychosocial. Employees of ages 18 to 29 years old, males, working for 4-6 years and working in rooms as attendant encountered more hazards.

Table 11. Proposed Plan of Action to Address the Occupational Hazards among Resorts Employees

Key Result Area/ Objectives	Strategies	Expected Outcome	Persons Involved
Ergonomic			
To reduce the exposure of resort staff to industrial cleaning materials	Use organic-based or natural cleaning for cleaning the resort such as baking soda, castile soap, vegetable glycerine and tea tree oil	The staff are not exposed to hazardous industrial chemical and cleaning materials	Purchasing Department
Physical			
To reduce manual handling and falls within the premises of the resort	Make critical control point where hazards are present like ramps and ladders	The staff are not manually handling the different operation of the resort.	Maintenance Department
Biological			
To reduce the presence of sharp materials that may cause injuries	Store sharp objects in proper storage Provide a room for hazardous materials	There is no sharp materials present in the work environment that could cause injuries	Housekeeping Department
Psychosocial Hazards			
To provide more time in the delivery of services to the guests	Employed more employees (outsourced) to address the needs of customers	There is sufficient time for the delivery of customers' request	HR Department

It was found out that working for 10 years and above encountered more hazards in terms of ergonomic and physical. Those who belong to other section (receptionist) encountered more hazards in terms of ergonomic. A plan of action was proposed to address the occupational hazards among resorts employees in district IV of Batangas province.

RECOMMENDATION

Resort employees may have daily physical assessment such as identification of back and shoulder pains of the employee. Therapeutic activities may be done such as yoga and exercise before and after shift of the staff and resort employees. Strict compliance to shifting schedules may be observed by the resort employees. The plan of action may be used to address the occupational hazards experience by the resort staff. A future study may be done to assess the occupational hazards of the resort employees using other factors associated with hazards in workplace.

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