

# Health Assessment of the Employees of the Provincial Government

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## ABSTRACT

This study focus on the mandate of the Civil Service Commission (CSC) on health and well-being of the employees that has been neglected by present and previous administration; through various memoranda issued by the CSC, the Provincial Government established its health and wellness program for the employees. To effectively implement the program, technical expertise from the Provincial Health Office (PHO) was sought to formulate an Assessment Tool to be used to assess the health status of the employees and to identify the contributory or risk factors for a person's likelihood to acquire disease. Using a structured survey questionnaire, the result shows that 45% of the total number of employees in terms of age are between 45 to 60 years old and 61% are presently diagnosed with hypertension, diabetes, cardio-vascular disorder, asthma and cancer. In the course of the study, it shows that the possibility of a person to develop a disease is through his lifestyle (Modifiable Risk Factor) and family history or hereditary (Non-Modifiable Risk Factors). This so called life style diseases prompted the emergence of health and wellness program as a corporate responsibility of the employers to help their employees cope with their health condition.

**Keywords:** health, wellness, risk factors, lifestyle, assessment

## INTRODUCTION

Paramount to effectively perform in any organization is the need for employees to be at their best health. Many experts are strongly arguing that providing a health and wellness program is an area of corporate social responsibility.

In a study conducted in the US, it was found that an unhealthy lifestyle, such as inactivity, poor nutrition and tobacco use, are driving up the occurrence of chronic diseases among workers. They develop pulmonary heart diseases and diabetes leading to decreased quality of life, poor performance at work and premature deaths (Mattke, Liu et al 2015). Since employees are spending more time at work, it is imperative that employers make interventions to avoid predictable decrease in performance, preventable sufferings and ultimately death.

Moreover, in the Philippines, the Food and Nutrition Research Institute of the Department of Science and Technology conducted a survey on physical activity; a comparison of the 2003 and 2008 results showed that in the occupational or at work domain, physical inactivity in Filipino males aged 20 to 65 has increased from 67 percent to 76.3 percent. Filipino females of the same age range, displayed the opposite, decreasing from 82.1 percent to 76.2 percent (Romualdo, 2017). Limited physical activity in the workplace can be considered an occupational risk. An organization that provides an enabling environment for physical fitness programs through policies and facilities can maintain and improve the physical well-being of its employees to ensure efficiency and productivity. Building a Culture of Workplace Wellness: Perspective from Philippine Organization identifies the barriers to living a healthier life (Hechanova, 2018), 57 percent of Filipinos blamed it on lack of time due to work while 47 percent admitted that it's due to "lack of personal motivation." Some also identified "distractions of modern life." These are the people who spend a lot of time glued to their gadgets and engaging in social media than engaging in physical activities.

It is on this premise that the Civil Service Commission (CSC), as the umbrella agency of all government institutions, enjoined all local government units to implement a

Physical/Mental Fitness Program and Sports Development Program for their government personnel (Memorandum Circulars No. 38, s. 1992, 6 dated April 20, 1995 and 8 s. 2011).

This program is also in coordination with the Occupational Safety and Health Standard of the Department of Labor and Employment to protect every workingman against the dangers of injury, sickness or death through safe and

healthful working conditions.

The Provincial Human Resource Management Development Plan (HRMDP) identified the Health and Wellness Program as one of its intervention areas under its Capability Development Program. Executive Order No. 43 dated April 12, 2011 created the Provincial Program on Health and Wellness to ensure that all provincial employees are in good health and can effectively and dutifully provide public service. All Bukidnon Provincial Hospitals were authorized to conduct Annual Medical Executive Check-Up as support to the Health and Wellness Program of the province (EO No. 44, 2011). As observed, there was a problem in the sustainability of the program because its importance was not properly communicated; younger employees took the annual medical check-up for granted so with the concerned agency by not providing the necessary laboratory reagents to conduct the tests. With this, it prompted the idea on conducting a survey on employees physical/medical condition in order to help employees find better care for early detection of illness and to sustain (budget) for the program.

The Provincial Government of Bukidnon (PGB) is composed of thirty seven (37) offices and divisions. This includes eight (8) provincial hospitals and seven (7) support agencies namely Trial Court Branches 8, 9, & 10; Clerk of Court; Commission on Audit; Department of Interior and Local Government; and Prosecutor's Office.

As a project jump off activity, the Health and Wellness Committee, in coordination with the Provincial Health Officer, formulated the Employee Health Survey (Risk Factors Assessment and Screening Procedures). The purpose is to establish a risk factor assessment and screening of the employees as the baseline information for the program.

A questionnaire has been designed to objectively assess the following from among the subject respondents: Demographic Profile, Non-Modifiable and Modifiable Risk Factors which includes Anthropometric Measurement, Cancer Screening, and Medical History. The information will be significant to warrant the establishment of a sustainable and effective wellness program designed for long term disease prevention, while being specific in addressing present health issues of the respondents.

## **FRAMEWORK**

The study is anchored on various journals particularly on health and wellness were considered in order to produce a reliable study. The theory on Method

and System for Managing Health and Wellness Programs guides the researcher to know how health and wellness came into existence, how it was defined by experts, and the importance for the development of a Wellness Program in the workplace.

According to the Global Wellness Institute, the origin of wellness, started in the ancient times and can be traced to the ancient civilizations of Greece, Rome and Asia, whose historical medicinal traditions has permanent influence in the modern wellness movement. Identified wellness practices recorded by Global Wellness Institute were Ayurveda (3,000-1,500 BC) which is widely known as Yoga; Traditional Chinese Medicine (3,000 – 2,000 BC) one of the world's oldest systems of medicine; and Hippocrates (500 BC) and Ancient 2 Roman Medicine (50 BC) that focused on disease prevention rather than cure. During the 19th century, a number of alternative healthcare methods and preventive care were founded and gained widespread popularity both in Europe and the United States. These were homeopathy, osteopathy, chiropractic, and naturopathy. In the 20th century, wellness spread and got serious. Dr. Halbert L. Dunn, Dr. John Travis, Don Ardell and Dr. Bill Hettler were physicians from the United States known as the “fathers of the wellness movement” they created their own comprehensive models of wellness, developed new wellness assessment tools, and wrote and spoke actively on the concept. Because of the spread of their unique study, many corporations began to develop their own workplace wellness programs. The rapid growth of the fitness and spa industries, together with the fast growing line-up of self-help experts, started to bring wellness concepts to the mainstream audience. The tipping-point of the wellness concept was during the 21st century as was documented in the New York Times article (Dan Rather, 2010) made a 60

Minutes segment on the topic. The fitness, diet, healthy living and wellbeing concepts and offerings flourished, and the concept of wellness transformed every industry, from food and beverage to travel.

Moreover, a study by World Health Organization (WHO), saw health promotion as more than just avoiding illness; it is seen as a guide for people to choose healthy lifestyles (Raphael, 1998). "Wellness is a composite of physical, emotional, spiritual, intellectual, occupational, and social health. Difficulty functioning in any of these areas has a negative impact on others" (Reardon, 1998); and “Wellness as a lifelong process which emphasizes ongoing work and development” (Schmottlach, 1990).

However, does health and wellness mean the same thing? “Health” is defined by Google as the absence from any disease and the overall mental and physical

state of a person, while “Wellness” refers to the state of being in the ideal mental and physical health. It is clear in the definitions that health and wellness means the holistic well-being of an individual physically and mentally and, a choice to keep healthy or live an unhealthy lifestyle.

So why is there a need for a comprehensive wellness program to be developed in the workplace? The Wellness programs came into existence because the responsibility of health care shifted from the government to the employer and from the health care industry/institutions to the consumer (Reardon, 1998). In the study conducted, private companies and organizations started to recognize the high medical costs that affected their companies whenever their employees got sick due to unhealthy lifestyles (Barnett, 1992 and Povall, 1994). In effect, they chose to limit medical coverage and shifted more costs to their employees.

A wellness program, is a set of health promotion and protection strategies implemented at the workplace, that includes policies, programs and benefits, all designed for the health and safety of all employees (Muscato, 2015). The United States Centers for Disease Control and Prevention (CDC) discussed the health consequences of the biggest health issue which is obesity. According to the Center, employees who are overweight or obese are prone to suffer from major health issues such as heart disease, diabetes, hypertension, stroke, liver disease and respiratory problems. Basically, the purpose of a wellness program is to help reduce the risk for certain health issues among employees and help them see how to make healthy lifestyle choices. According to Mayo Clinic Health Risk Assessment data, the most prevalent lifestyle risk factors include poor nutrition, emotional health, safety and weight. These risk factors are good places to begin for many companies seeking to develop wellness initiatives.

Likewise, it makes sense that a healthy employee who focuses on the above factors will have positive results in terms of performance and behavior; this in turn contributes to their employer’s bottom line. Thus, a healthy employee is an asset to any organization. This is the reason for the need to develop a comprehensive wellness program in the workplace to keep the employees protected and secure, and keep the company from costly and expensive medical expenses. A sedentary lifestyle will increase an individual’s risk of acquiring several chronic diseases to include cardiovascular disease and cancer (Blair et al., 1992), this leads to an increased mortality risk, with misperceived factors such as age, smoking habit, cholesterol level, and blood pressure (Blair et al., 1989). The 1990 guidelines suggests activities like walking, running, bicycling, swimming, and endurance games (ACSM, 1990) with a specified frequency of 3-5 days per week, maximum

heart rate intensity of 60-90% that will last 20-60 minutes of continuous activity. In the same context, the Healthy People 2000 recommends to include the proportion of adolescents and adults who engage in light to moderate physical activity for at least 30 minutes per day of walking or running (U.S. Department of Health and Human Services, 1990).

According to a study conducted by, workplace wellness program has become more common in private and government organizations (Patel, 2010). She further states that the main intention of any wellness program is to get employees interested and engaged in wellness initiatives of the organization. Despite the fact that several studies have already shown the importance of health and wellness in the workplace, still there is difficulty in the implementation especially among government agencies/organizations. This may be because they are unsure of the types of programs that are available or they do not recognize the impact it can make on their employees and the return of investment it will give to the organization. Other government agencies are dependent on the directives of the Civil Service Commission on whom they give the leverage of crafting a health and wellness program based on the needs of the employees; unlike the private companies wherein the Department of Labor and Employment has formulated, successfully implemented and continue to improve their health and wellness program to which they have proven to be effective.

In a study “A Guide for Considering a Wellness Program” (Muscato, 2015), she mentioned that the Centers for Disease Control and Prevention (CDC) identified categories for Wellness Programs. These categories are recommended to help the program succeed:

1. Health related programs - health related programs are available to employees' to help them change certain health behaviors; these may be offered within or outside the workplace. Example of these are: offering a discounted gym membership; providing an on- site gym for employees to utilize; offer cooking lessons especially for those with health issues needing dietary restrictions.

2. Health related policies - generally formal or informal written statements designed to protect and promote employee health. An example of this would be a policy that states “no smoking in the workplace or facility”.

3. Health benefits - health benefits will be offered by employers to their employees such as health insurance coverage, discounts towards health services and/or co-pay health insurance plans; and

4. Environmental supports - these are physical factors that are around the workplace that will help encourage raise healthy habits or activities. It could

be that the employer will allow the employees on their breaks, to walk around the block due to its location and sidewalk advantages, or they may offer exercise classes after work hours or on the weekends if the office is near a grassy area. This may help increase participation in the wellness plan if the employee feels that their employer is allowing them to join in wellness activities even during office hours.

Theoretically, it is appropriate to implement health and wellness program in the workplace since most of the working populace spend half of their lives in their respective jobs. Eight hours a day, or 40 hours a week excluding hours spent for overtime is the number of hours spent of every employee in the organization; mostly sedentary since majority of the employees are office-based and have less physical activity. Having a wellness program creates potential gains that may attribute to more savings. Depression, anxiety, migraines, arthritis, diabetes and, back and neck pain are the most common health issues related to presentism. In the same study, another potential gain for a wellness program is higher employee morale. The more the employee morale is improved, the more productive they are in their respective jobs. The advantage of wellness programs to employers mean reduced claims activity, reduced absenteeism, and improved productivity. In her book "Building a Culture of Workplace Wellness: Perspective from Philippine Organization" (Hechanova, 2018) identifies the barriers to living a healthier life, 57 percent of Filipinos blamed it on lack of time due to work while 47 percent admitted that it's due to "lack of personal motivation." Some also identified "distractions of modern life." These are the people who spend a lot of time glued to their gadgets and engaging in social media than engaging in physical activities.

There has been a number of memoranda that support the implementation of health and wellness programs in the local government sector, but unfortunately the political will of the top management does not coincide with their respective program. With this, the committee is establishing a data bank of the existing health issues, concerns, and conditions of each employee under the Provincial Government of Bukidnon by conducting a health assessment and screening. From this basic information, the Employees' Annual Physical Check Up will then be the product of the assessment to implement the program. Other activities like engaging in sports and fitness program, rehabilitation of the old hospital building for the gym, and purchase of physical equipment, will soon follow.

## OBJECTIVES OF THE STUDY

To support the mission of the Province with focus on the general welfare of its constituency and its human resource, this project aims: (1) To determine the profile of the employees of the provincial government of Bukidnon in terms of Age, Sex, Civil Status, Religion, Status of Employment, and Blood Type; To determine the Non-Modifiable Risk Factors of the PGB employees in terms of: Hypertension, Cardio-Vascular Disorder, Diabetes, Asthma, Cancer; (3) To determine the Modifiable Risk Factors of the PGB employees in terms of: Cigarette/ Tobacco Smoking (Age Started Smoking & Age Quit Smoking) Alcohol Intake (Beer, Distilled Spirits, Wine & Rhum), Body Mass Index, Physical Activity; (4) To assess the Present Health Condition of the PGB Employees in terms of: Hypertensionm Cardio-Vascular Disorder, Diabetes, Asthma, and Cancer.

## METHODS

### Research Setting



*Figure 1.* Provincial Government of Bukidnon

This project paper was conducted in Malaybalay City, Province of Bukidnon, particularly the Provincial Government of Bukidnon that belongs to a Local Government Unit supervised by the Local Chief Executive in the province, the Provincial Governor. The Provincial Government of Bukidnon comprises 29 offices. 20 offices located in the Provincial Capitol Compound, 8 Bukidnon Provincial Hospitals situated in eight municipalities (Malitbog, Talakag, Manolo Fortich, Malaybalay, Maramag, Kalilangan, San Fernando, Kibawe), 16 Division/Offices and 12 support offices. It has a manpower complement of Three Thousand Three Hundred Twenty Nine composing 1,864 permanent/regular/



elected/co- terminus, 367 casual and, 1,098 job order employees.

### Research Design

The research design used in this study is descriptive quantitative research design. In this research method, the researcher actively interacts with the respondents and used an open- ended questionnaire.

### Participants and Sampling Procedure

The researcher adopted a structured survey questionnaire that assessed and evaluated the respondents' participation of purposively selected employees. Purposive sampling design was used by the researcher in to get a reliable result.

As discussed in the previous paragraphs, the Provincial Government of Bukidnon has a huge population in terms of human resources, aside from its workforce the agency consisted of more than 20 offices; in order to come up with a baseline information for the purpose of this study, the researcher through the guidance of the Adviser opted to have 100 participants randomly selected among the 20 offices to achieve a reliable result.

### Research Instruments

The researcher utilized a structured survey questionnaire to gather biographical information and health conditions of the respondents. The researcher personally accessed the opinion of the experts in crafting the questionnaire; (Reyes, 2019), Provincial Health Officer provided assistance to formulate the questionnaire.

### Data Gathering Procedure

Permission to conduct the study was first acquired from the adviser and Dean of Graduate Studies. An application form from Research Ethics was applied from the office for Research, Publication, and Extension.

Due to the bureaucratic system of the local government, an approved letter was first obtained prior to the conduct of this survey in order that full support from the top management and cooperation among employees will be fully achieved.

Since the offices were in adjacent location, the proponent personally sought help from all the Administrative Officers of these offices. They then took charge of the data gathering through simple random sampling, collection of results and submission of the accomplished forms to the Provincial Human Resource Management Office where the proponent presently holds office.

## **METHODS**

Reliability analysis was performed for the instrument because it is tailored-made for the researcher following Department of Health standards.

### Validity and Reliability of the Instruments

As a pre-requisite for the conduct of a research paper, the Survey Questionnaire being used for this document passed through a reliability and validity test and ensued to be reliable and valid tool to conduct a study.

### Statistical Techniques

The statistical technique used in this study is Frequency, Mean and Standard Deviation. Frequency was used in Problem 2 and 3 while mean and standard deviation was used in Problem 1.

## **RESULTS AND DISCUSSION**

There were three (3) areas considered in this study the Demographic Profile, Non- Modifiable and Modifiable Risk Factors which includes Anthropometric Measurement and Medical History. The discussions will solely focus on these areas.

Objectives 1: To describe the demographic profile of the employees of the provincial government of Bukidnon in terms of Age, Sex, Civil Status, Religion, Status of Employment, and Blood Type

Demographics are statistical component of a survey used to identify population segments by specific characteristics to gather basic information. Demographic profiling herein includes age, gender, civil status, religion, blood type and status of appointment. But discussion on this paper focuses on respondents' age and blood type as an important variable.

Table 1

*Demographic Profile of the Employees of the Provincial Government of Bukidnon in Terms of Age, Blood Type, Gender and Status of Employment*

<b>Age</b>	<b>f</b>	<b>%</b>
20 – 30	30	30.00
31 – 40	32	32.00
41 – 50	20	20.00
51 – 60	13	13.00
Above 60	5	5.00
<b>Blood Type</b>		
O	39	36.00
A	14	14.00
B	20	20.00
AB	27	27.00
<b>Gender</b>		
Male	45	45.00
Female	55	55.00
<b>Status</b>		
Job Order	20	20.00
Casual	18	18.00
Permanent	62	62.00
Contract of Service	5	5.00
<b>Total</b>	<b>100</b>	<b>100.00</b>

Table 1 shows the profile of the ages of the subject respondents. It shows that majority or 32% of the subject respondents ages range between 31- 40 years old. The next are 30% from 20 - 30 years old, 20% for 41 – 50 years old, 13% for 51 – 60 years old, and only 5% are above 60 years old. It is a fact of life that health declines with age. According to a study conducted by the (WHO, 2018), ageing can't be stopped or reversed but there are things that can be done to slow down aging by allowing us to stay fit and healthy. It is where Environment can help to the aging population by providing activities like exercise, socialization and healthy/nutritious food.

In terms of Blood Type, 39% are type O, 27% are type AB, 20% are type B and 14% are type A. According to (Bell, 2016) a genetic Counselor at Wesley

Medical Center in Wichita, Kansas research suggests that certain blood types can raise one's risk of potentially serious conditions. She based her view on 2014 study conducted to more than 1,000 people with blood type AB have an 82 percent greater risk of cognitive impairment, blood type A have a 24 percent higher risk of heart attack, type B was associated with an 11 percent higher risk of cardiovascular disease, while type O according to new research published in May 2018 may be at higher risk of uncontrolled bleeding based on an observational study in Critical Care of 900 Japanese people. It just only shows that age and blood types are factors in determining health risk of the employees.

As to Gender majority or 55% of the subject respondents are female and only 45% are male. The profile of the respondents in terms of their civil status shows that 68% of the respondents are married, 26% are single, 5% are widows/ers and 1% is separated. It also shows that the profile of the respondents in terms of their employment status is 69% regular or permanent employees, 19% are Job Order employees and 12% are Casual employees.

In an article entitled "How Gender Affects Health" (Strauss, 1994) she states that when it comes to health, women and men aren't equal. Their biology allows escaping certain health problems. However, most health conditions affect both men and women in varying degrees and ways.

The result of the survey shows that the questionnaires were equally distributed amongst the participating offices. As the number shows, 62% of the total respondents are Permanent or Regular employees, 18% are Casual employees, 20% are Job Order employees, and 5% employees under Contract of Service with the Provincial Government of Bukidnon.

Objectives 2: To determine the Non-Modifiable Risk Factors of PGB Employees in terms of Hypertension, Cardiovascular Disease, Diabetes Mellitus, Asthma and Cancer

### Non-modifiable Risk Factors

Risk factors are conditions that increase one's risk of developing a disease. The Non-modifiable risk factor is uncontrollable like age, race and family history.

Below are the identified non-modifiable risk factors of the respondents:

1. Hypertension
2. Cardiovascular Disease
3. Diabetes Mellitus
4. Asthma
5. Cancer

From one study to another explains that a person have a greater risk to develop one if not all of these disease if it is on his/her genes. Having close biological relative with certain disease, say Diabetes may indicate one have a higher risk to acquire.

Salient data of this study is to identify information the prevalence of the common diseases that affects the health condition of a person. Since I am dealing with the employees, we make considerations on the universal illness that attacks the health of the employees; since the Provincial Health Officer of Bukidnon was on our team, with the help of the Chief of Hospital it was decided to identify these that attacks the health of the employees of PGB, thus it became a denominator to be able to conduct a good study based on the data that will be collected.

Table 2

*Presence of Hypertension, Cardiovascular Disease, Diabetes mellitus, Asthma, and Cancer*

Presence of Hypertension, Cardiovascular Disease, Diabetes mellitus, Asthma, and Cancer		
Presence of Hypertension	F	%
Yes	61	61.00
No	39	39.00
Presence of Cardiovascular Disease		
Yes	19	19.00
No	81	81.00
Presence of Diabetes mellitus		
Yes	23	23.00
No	77	77.00
Presence of Asthma		
Yes	24	24.00
No	76	76.00
Presence of Cancer		
Yes	12	12.00
No	88	88.00
Total	100	100.00

Table 2 above shows that 61% of the respondents have presence of hypertension while 39% does not have this illness. There are a number of factors that can put a person at risk for developing high blood pressure (hypertension). Understanding these risk factors can help us be more aware of how likely a person are to develop high blood pressure. Common factor is Family history. When your parents or other close blood relatives have high blood pressure, there's an increased chance that you'll get it, too. Since age is inevitable, the older we are, the more likely we are to get high blood pressure, because as we age, according to experts, our blood vessels gradually lose some of their elastic quality, which contribute to increased blood pressure. Results shows that 19% of the respondents have history of cardiovascular disease while 81% does not have this illness. There is an inborn element to cardiovascular disease, meaning a family history of this condition is considered to be a risk factor. This applies to a person's first-degree relative who developed Cardiovascular Disease at a relatively young age. This is the case if the person's father or brother developed cardiovascular disease before the age of 55, or their mother or sister developed it before the age of 65. 23% of the respondents have history of Diabetes mellitus disease while 77% does not have this illness. Some factors that increase or decrease our risk for diabetes are inherited from our parents. Having a close biological relative with diabetes may indicate we have a higher risk. Also, as we aged the chance of developing pre-diabetes goes up mostly after age 40. Some pregnant women develop diabetes until up to the time the baby is born, and have a higher risk of developing diabetes later in life. 24% of the respondents have history of Asthma disease while 76% does not have this illness. According to a study conducted by American Lung Association, if you have a parent with asthma, you are more likely to develop asthma three to six times than someone who does not have a parent with asthma; and 12% of the respondents have history of Cancer while 88% does not have this illness. Surveillance, Epidemiology, and End Results shows that Cancer risk factors include things we people cannot control just like age and family history. A family history of cancers can be a sign of a possible inherited cancer syndrome.

Objective 3: To determine the Modifiable Risk factors in terms of Smoking, Drinking Alcoholic Beverages, Body Mass Index and Physical Activity that may contribute to the employees' health status

### Modifiable Risk Factors

These are contributory factors due to unhealthy lifestyle of a person, these increases the likelihood of acquiring diseases. This includes weight, physical

inactivity, smoking and drinking liquor. This section of the paper will discuss the identified risk factor that contributes to a worker's chance to develop illness.

Table 3

*Showing the Cigarette / Tobacco Smoking Activities of the Employees*

<b>Smoking</b>	<b>f</b>	<b>%</b>
Never	37	37.00
Passive	25	25.00
Current	38	38.00
<b>Age Started Smoking</b>		
10	37	37.00
11 – 25	61	61.00
26 Above	2	2.00
<b>Age Quit Smoking</b>		
21 – 40	8	8.00
41 Above	92	92.00
<b>Total</b>	<b>100</b>	<b>100.00</b>

Tables 3 shows the modifiable risk factor that affects the health condition of the respondents in terms of smoking. It shows that 38% of the respondents are currently hooked in smoking; 37% are non-smokers while 25% are passive smokers. 61% of these smokers started smoking between 11-25 years old, 2% started at the age of 26 but none started smoking at the early age of 10 years old. 8% of these smokers quit smoking between the age 21- 40 and 92% quit smoking at the age of 41 years old above.

In a comprehensive study on “Health Effects for Younger Smokers” conducted in Australia (Greenhalgh, EM & Winstanley 2015) found that smoking in the early childhood and adolescence can cause a range of immediate health problems and lays the foundation for the development of serious disease in adulthood due to impaired lung growth. This reduced lung growth could increase the risk of Chronic Obstructive Pulmonary Disease later in life.

The table above also shows that there is a high percentage (92%) of smoke cessation at the age of 41 and above. There is an old idiom “life begins at 40”; this may seem true because when a person turns forty years old, reality of life begins like health deterioration, onset of age related diseases like arthritis, hypertension

and the like. It is also during this stage of life where doctor’s advice is more important than the vices a person enjoyed for years just to prolong life.

Table 4

*Showing the Alcohol Intake of the Employees*

<b>Classification</b>	<b>Frequent</b>	<b>%</b>	<b>Occasional</b>	<b>%</b>
Beer	59	59.00	41	41.00
Wine	65	65.00	35	35.00
Distilled Spirit	66	66.00	34	34.00
Rhum	33	33.00	67	67.00

Table 4 shows Modifiable risk factor that affects the health condition of the respondents in terms of drinking liquor shows that 59% of the respondents drank beer frequently, 41% drank beer occasionally. For wine, 65% drank it occasionally, 35% drank frequently. For distilled spirits, 66% drank this type of liquor frequently, 34% drank occasionally. For rum 33% of the respondent drank this frequently and 67% drank occasionally. This result just shows that the most common alcoholic beverages that people enjoy drinking are beer, wine and distilled spirit.

Cardiologist (Chia, 2017) at Mount Elizabeth Hospitals, explains the effects of smoking and drinking on our health on his article “How Smoking and Drinking Affects the Body”. He states that tobacco and alcohol share similar effects on the heart. The risk of heart disease increases with the amount of smoking while the impact of drinking is more complex. Moderate drinking e.g. 3-14 drinks a week may be associated with a lower risk of heart attack, while heavier drinking increases the risk of heart attack, heart failure, stroke and high blood pressure. Smoking is common among alcohol drinkers, and smokers and drinkers shares similar behavioral and lifestyle patterns; it is currently unclear whether it is the combined or independent effects of smoking and alcohol that greatly raises cardiovascular risk.



Table 5

*Showing the Body Mass Index of the Employees*

<b>Height</b>	<b>f</b>	<b>%</b>
4' – 5'5" ft	75	75.00
5'6" – 6'5" ft	25	25.00
<b>Weight</b>		
Below 40 kls	4	4.00
41 – 60 kls	49	49.00
61 – 75 kls	34	34.00
Above 76 kls	13	13.00
<b>Waist</b>		
31 – 45 in	87	87.00
46 – 60 in	3	3.00
61 in and above	10	10.00
<b>Total</b>	<b>100</b>	<b>100.00</b>

Table 5 shows the modifiable risk factor that affects the health condition of the respondents in terms of body measurement. It shows that 75% of the respondents stood between 4 feet to 5.5 feet, 25% stood between 5.6 feet to 6.5 feet and no one of the respondents stood 4 feet. As to their respective weights, 49% weighed between 41-60 kilograms, 34% weighed 61-75 kilograms, 13% weighed above 75 kilograms, 4% weighed below 40 kilograms. As to their waist measurement, 87% measured between 31-45 inches, 10% measured 61 inches above, and 3% measured between 46-50 inches. Based on the table above, height-weight and waist measurement of these employees are within the normal range, in reference to the standard BMI chart and the International Diabetes Federation Guidelines.

Table 6

*Showing the Physical Activities of the Employees*

<b>Showing the Physical Activities of the Employees</b>		
<b>Type of Work</b>	<b>F</b>	<b>%</b>
Office	65	65.00
Labor	6	6.00
Field	7	7.00
Liaison	22	22.00
Means to Travel for Work		
Ride	80	80.00
Walk	20	20.00
Activity other than Work		
Sedentary	64	64.00
Active	36	36.00
Total	100	100.00

Table 6 modifiable risk factor that affects the health condition of the respondents in terms of their physical activity shows that 65% of the respondents are office-based; 22% are doing liaison jobs, 7% are doing field work and 6% do manual labor. As to their means of travel for work, 80% of the respondents ride a vehicle, while 20% walk to work. As to their activity other than work, 64% are active while the 36% remains sedentary.

Based on a study by American Psychological Association, Steven Blair, PED called physical inactivity as the "the biggest public health problem of the 21st century." Meaning that people who have sedentary jobs has no regular physical activity program and are generally inactive around the house or yard. These types of people are exposed to the hazard of inactivity compared with those who are moderately active and fit. According to him there is a need for numerous changes to promote extra physical activity for all that includes public policies, promote activity in worksites and, social and physical environmental changes.

Objectives 4: To identify the Present Health Condition of the PGB Employees in terms of Hypertension, Cardio-Vascular Disorder, Diabetes, Asthma and Cancer In the previous pages of this study, I have already enumerated and identified the non - modifiable risk factors those that are genetically and biological inherent to every individual and the modifiable risk factors those that

relate to the individual's life style over the years. In this portion of the study, I am presenting the current health condition of the employees.

As observed in the previous years, these are the common illnesses being experienced by PGB employees or of the person as a whole. It may not mean that one illness is present or experienced by a person but one illness may complicate due to some factors like stress, self - medication and non-awareness of existing illness. This will also serve as basis for the formulation of a Wellness Program that will both fit the healthy and to those with health conditions.

Table 7

*Showing the Present Medical History of PGB Employees*

Medical History	YES	%	NO	%
Hypertension	61	61.00	39	39.00
Diabetes	23	23.00	77	77.00
Asthma	24	14.00	76	76.00
Cancer	12	12.00	88	88.00

Table 7 shows that 61% of the respondents are presently diagnosed Hypertension; 19% with Cardiovascular Disease; Diabetes 23%; Asthma 24% and Cancer 12%. Despite the fact that majority of the answers declared that they were not diagnosed or suffering from these illnesses, still those identified who are presently suffering from the above mentioned illness are vulnerable for extreme effects like stroke, complications and other form of health deteriorating activities.

These vulnerable employees will be the focus of the proposed program on Health and Wellness Program.

## CONCLUSIONS

After the assessment was conducted and results has been clear, it shows that in general, the employees of the Provincial Government of Bukidnon is not an ailing personnel, to which the researcher was satisfied of the outcome. Among the respondents, show vulnerability to acquire chronic diseases such as but not limited to hypertension, cardio-vascular disease, diabetes, asthma and cancer as the results shows that most of them have genetic history on these type of diseases and even are presently diagnosed of suffering some but not all of the disease; this same group live an unhealthy lifestyle like cigarette smoking, drinking liquor,

and physical inactivity which in some way are contributory factor for them to obtain such illness. Though their Body Mass Index shows normalcy, still it is not a guarantee that they are totally healthy because according to experts only a medical laboratory results can verify if the body is healthy or unhealthy. With this results, it is necessary and find it a must to create and implement a Health and Wellness Program to help the employees be able to preserve their healthy well-being.

## RECOMMENDATIONS

Based on the findings and conclusion, the following are the recommendations:

1. Creation of a Health and Wellness Committee may be proposed to spearhead the planning and crafting implementing policies and procedures for the Wellness Program. A sample Executive Order and Program Proposal for this purpose is presented (see annex);
2. Construction of employee cafeteria may be recommended to the governor that will sell healthy snacks and or lunch to encourage employees to eat healthy and live healthy at the same time, and a venue for employees to unwind when a day's work is stressful;
3. Once a week Zumba time maybe conducted every Friday or contact a local fitness hub to accommodate employees for an hour of physical activity;
4. In the regular learning event activities maybe it is advisable to include topics or subject area that discuss or orient employees on health and wellness;
5. It is strongly recommended that the Annual Medical Check-up maybe revived;
6. Future researches maybe conducted to verify and confirm the results of the study using other variables.

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