Costs For Work Absenteeism Of Doctors In A Public Hospital In Times Of Pandemic

Larco Pachacama Maria Fernanda[1] , Casilda Paquisha Intriago Mora[2] , Elisa Juverly Zambrano Zambrano[3] , María Marjorie Zambrano Intriago[4] , Gloria Isabel Loor Carvajal[5]

[1]*Docente del Departamento de Ciencias Económicas, Administrativas y de Comercio, Universidad de las Fuerzas Armadas - Ecuador, Magister en Gerencia en Contabilidad y Finanzas Corporativas, mflarco@espe.edu.ec, https://orcid.org/0000-0002-7216-2821*

[2]*Docente de Facultad de Ciencias Administrativas y Económicas, Universidad Técnica de Manabí - Ecuador, Doctorante en Ciencias Contables y Financieras, paquisha.intriago@utm.edu.ec, https://orcid.org/0000-0002-3786-3948,*

[3]*Docente de Facultad de Ciencias Administrativas y Económicas, Universidad Técnica de Manabí - Ecuador, Doctora en Ciencias Contables y Financieras, elisa.zambrano@utm.edu.ec, https://orcid.org/0000-0001-9047-7117*

[4]*Docente de Facultad de Ciencias Administrativas y Económicas, Universidad Técnica de Manabí - Ecuador, Magister en contabilidad y Auditoria, marjorie.zambrano@utm.edu.ec, https://orcid.org/0000-0002-4471-5791*

[5]*Docente de Facultad de Ciencias Administrativas y Económicas, Universidad Técnica de Manabí - Ecuador, Magister en Educación y Desarrollo Social, gloria.loor@utm.edu.ec, https://orcid.org/0000-0001-7327-2005*

Abstract

The analysis in the public and private institutions of Ecuador on work absenteeism caused by COVID19, has been of vital importance for the Hospital, for this reason, the objective of this research was to determine the costs generated by work absenteeism and the main diseases. obtained by the workers of a second level public hospital in the country, in the period from January to December of the year 2020, the data and information were obtained in the Department of Human Talent of the Hospital, considering the justified absenteeism for medical reasons, which was determined by means of a formula to establish the values per hour based on the salaries of the doctors, for this investigation it was applied a non-experimental cross-sectional design methodology, being a descriptive-quantitative applied research, the sample of this investigation was 185 doctors, reaching a justified labor absenteeism rate of 32% and COVID-19 was determined as the main cause of absenteeism with a cost of $65,321.89, however, the doctors during the year 2020 were absent in 1,914 days, generating a cost to the hospital of $125,576.68. For this calculation, the 3 remunerations that doctors have of $1,676, $2,641 and $2,967 were considered. The number of patients treated during the year 2020 was 132,335, for a total of 185 doctors who work in the Hospital, a total of 715 patients treated by each doctor is obtained, which generated a double cost in the Hospital.

Key words Covid-19, Doctors, Hospital, Work absenteeism.

INTRODUCTION

At present, absenteeism is one of the main causes of concern, both in private and public companies, since it generates a decrease in productivity and because of this there are economic losses, work overload for those who work normally, generating the need to carry out an in-depth analysis to determine the main causes and the costs that these absences entail, to generate preventive measures to avoid or reduce labor absenteeism.

Absenteeism refers to the absences or absences of employees at work, or in a broader sense, it is the sum of the periods in which employees are absent from work, whether due to absence, delay or some other reason {Formatting Citation}.

Absenteeism from work is defined as the absence of the worker in a dependency relationship to his working day, for one or more days, or during a certain period (ADECCO, 2018). This absence from work can be due to medical and non-medical causes, thus the International Labor Organization (ILO) defines absenteeism due to medical reasons, as the period in which the worker does not attend his job, which is attributable to a disability of the individual, this does not include absenteeism due to imprisonment or pregnancy (ILO, 2018).

According to Chiavenato (2011), there are several causes of absenteeism, among which he highlights proven illness, unproven illness, family reasons, involuntary delays due to force majeure, voluntary absences for personal reasons, financial problems, etc. transportation problems, low motivation at work, inadequate supervision of bosses, inadequate policies of the organization (p.124).

In a systematic analysis carried out (Valencia et al., 2019) to determine the medical causes of work absenteeism in the health sector, it was shown that among the main causes are illness, delay or absence, and calamities, adding to the health sector the high workload and the culture of having one or more jobs simultaneously.

ADECCO (2018), points out that companies focus on taking measures to reduce the rate of absenteeism, through home medical control, personalized follow-up, maintaining a medical service in the workplace, greater measures to prevent occupational accidents, process of control of the medical certificates presented by the workers, vaccination campaigns to avoid diseases such as the flu, however, since 2020 an atypical labor situation has been experienced, due to the health emergency that exists worldwide, which has generated an increase in medical permits due to COVID-19.

Coronaviruses are a large family of viruses, some of which have the ability to spread from animals to people. They produce clinical pictures ranging from the common cold to more serious diseases, as occurs with the coronavirus that caused severe acute respiratory syndrome (SARS-CoV) and the coronavirus that causes Middle East respiratory syndrome (MERS-CoV), (MSP, 2021a). According to studies and analysis, this Institution of Ecuador reports that the new coronavirus is called Corona Virus Disease 2019 = COVID19.

COVID-19 had its origin at the end of 2019, in the city of Wuhan (China) cases of pneumonia of unknown etiology were reported, whose epicenter was a wholesale market where seafood and live animals were sold, the source of origin, transmission to humans and the mechanisms associated with the pathogenicity of SARS-CoV-2 are still unclear; however, its resemblance to SARS-CoV and several other bat coronaviruses was recently confirmed through studies related to genome sequencing (Khan et al., 2020).

Since 2020, COVID-19 has been one of the main disturbances that caused alterations in essential health services, according to what the (Organización Mundial de la Salud, 2021), indicates, it continues to be an existing problem altering services. essential health services in 90% of the countries worldwide.

According to the Ministry of Public Health (MSP) of Ecuador, from February 29, 2020 to March 31, 2021, there are 328,755 cases confirmed by PCR tests, it should be noted that cases confirmed by other testing mechanisms are not counted in a database, for this period there were 11,977 deaths from said disease, 4,870 deaths from probable COVID-19, which adds up to a total of 16,847 deaths, that is, there is a 3.6% mortality rate for patients confirmed with COVID -19, if probable cases were considered, there would be 5.12%, which is higher than the percentage indicated worldwide (MSP, 2021b).

Among the measures applied in March 2020 that were the most representative to mitigate contagion were: vehicle restrictions, closure of establishments, restricted hours and several institutions reduced interactions between their employees with the aim of reducing the risk of contracting the virus (White et al., 2020); During this time of confinement and strict measures, the health sector had to work in person, becoming infected with COVID-19, generating work absenteeism.

In Ecuador there are several studies regarding absenteeism focused on the health area, but in different occupational groups such as nursing professionals, specifically one applied in the City of Quito, (Peralvo Quishpe & Pérez Pérez, 2018a) in their study determined that the individual perception of absenteeism is 26%, while the group perception is 58%, attributing absenteeism

to general illness, causing exhaustion and irritability in colleagues.

The high costs that labor absenteeism and the COVID19 pandemic bring with it generate great concern in organizations since direct costs of disabled personnel (salaries) must be assumed, in addition to indirect costs such as: salaries of replacement and reduction personnel in the quality of the service (Sierra Ávila, 2017). Thus, health companies, as well as other organizations, transform factors of production into goods and services, which makes them productive. This implies a quality provision at lower costs to achieve efficient and effective production according to the complexity of the health services they offer and the class of patients they serve (Bonilla Serrano et al., 2014).

This research was carried out in a city on the Ecuadorian Coast, in a second level Hospital that forms the health network of the Ministry of Public Health, the research was carried out in this institution focusing on the large amount of absenteeism of doctors of the hospital, during the year 2020, there is currently no official economic quantification, due to the absenteeism that has been generated as a result of COVID-19 in personnel of the public health system.

In this context, the present research work aims to: Determine the main diseases associated with absenteeism due to medical reasons in the staff of a second-level hospital in the city of Santo Domingo and calculate the costs incurred by absenteeism due to medical reasons, evaluating the incidence of COVID 2019, in the period from January to December 2020.

LITERATURE REVIEW

Case Studies
The research carried out by the Doctor (Negrete Argenzio, 2016), on Analysis of

the causes of absenteeism of the medical and nursing staff at the Roberto Gilbert Elizalde Hospital in the year 2014-2015, it was found that after applying the study in 282 health people who work in rotating shifts and with more than 1 year in the Hospital, obtaining that the highest percentage of absenteeism is generated in the workers of the night shifts and with greater seniority in the hospital, some general conclusions date from of the crossing of information with a work climate survey, in which it is determined that the absent staff is the dissatisfied one.

Likewise (Peralvo Quishpe & Pérez Pérez, 2018b) on work absenteeism in the professional nursing staff of the Carlos Andrade Marín Hospital in the city of Quito, October 2017-March 2018, it was possible to determine several important aspects of direct affectation in the health personnel, in the nursing area, in which it indicates that there is an affectation by absenteeism in a majority way in relation to other health professionals, being affected mainly by general diseases in 99% and 1% by occupational diseases , causing an exhausting effect on staff who worked normally.

Work Absenteeism
In the dictionary of the Spanish Language, we find as a definition of absenteeism: Abstention from attending a job or performing a duty (RAE, 2015), however, there are several definitions that can be obtained from various authors as detailed below. continuation: The International Labor Organization (ILO) defines absenteeism as "non-attendance at work by an employee who was thought to be attending, excluding vacation periods and strikes; and absenteeism from work for medical reasons as the period of sick leave attributable to an individual's disability, except for that derived from normal pregnancy or prison "(Gorostegui, 2018).

The International Association of Occupational Health defines absenteeism as the involuntary and unexpected absence of the worker from his work area due to illness, accident, death, family causes, among others, and is accepted and supported by Social Security laws. Cuevas et al., (2012) taken from (Negrete Argenzio, 2016).

The author Chiavenato in his book on Human Resources Administration explains a definition of absenteeism which is the sum of the periods in which employees are absent from work, either due to absence, delay or some other reason (Chiavenato, 2011).

Types of Absenteeism
In the article entitled "work absenteeism" prepared by (Mesa M & Kaempffer R, 2004) in Chile, it defines four models by which absenteeism is generated, which are detailed below:

1. Economic model of labor absenteeism: it is generated in two forces: the individual motivations for absence of workers and how much absence can be tolerated by employers.

2. Psychosocial model of work absenteeism: the total of lost time creates a culture of absence in different industries and occupations.

3. Medical model of absenteeism from work: There are several factors that contribute to a pattern of absenteeism from work: demographics (age, gender, and occupational level), job satisfaction (overall, compensation levels, sense of accomplishment, etc.), organizational characteristics (to larger organizations and work units, higher levels of absenteeism), job content (levels of autonomy and

responsibility) and others such as commitment, distance to work, etc.

4. Absenteeism from work and organizational withdrawal: This model maintains that workers who are going to voluntarily withdraw from organizations have a higher rate of absenteeism than those who remain.

Triggers for work absenteeism

Several authors who determine different types of factors, for this investigation two authors will be mentioned, the first is (Gorostegui, 2018) which establishes that there are two types of investigation, type I established due to lack of work, that is, the simple lack of employee to work and type II considered body present, that is, despite the presence of the worker at work, he does not perform adequately, causing a decrease in productivity.

Another author who narrates the different factors of absenteeism is (Chiavenato, 2011). which establishes the following:

a) Proven illness.
b) Unproven disease.
c) Various reasons of a family nature.
d) Involuntary delays due to force majeure.
e) Voluntary absences for personal reasons.
f) Difficulties and financial problems.
g) Transportation problems.
h) Little motivation for work.
i) Poor supervision of bosses.
j) Inadequate policies of the organization.

Calculation of the absenteeism rate

The absenteeism rate reflects the percentage of time not worked as a result of absences in relation to the expected or planned volume of activity (Chiavenato, 2011). According to this author, the formula is as follows:

$$\text{Absenteeism rate} = \frac{\frac{\text{\# of people}}{\text{Days missed due to absence}}}{\text{Average value od \# of days} * \text{\#of working dyas}} \times 100$$

This formula is aimed at obtaining a result per day of work; however, calculations can be made for delays and half absences through the following formula described by the same author mentioned above:

$$\text{Absenteeism rate} = \frac{\text{Total man hours lost}}{\text{Total men hours worked}}$$

Likewise (Peralvo Quishpe & Pérez Pérez, 2018a) in their research establishes another formula to obtain the absenteeism rate considering whether absenteeism is justified or unjustified; therefore, to obtain the justified absenteeism rate, the hours lost due to accident, illness, legal leave, among other justifications, are considered, for which the following formula is considered:

$$\text{Excused absenteeism rate} = \frac{\text{Excused lost hours}}{\text{Total numbers of working hours available}} \times 100$$

In our research, this formula was considered to be applied in our study, since we have data on justified absenteeism, delivered by the Human Talent Department of the Hospital.

Hospital Specialties

a) External Consultation:

Traumatology, Neurology, Internal Medicine. Rheumatology, Neurosurgery, Traumatology, Nutrition, Genetics, Vascular Surgery, Plastic Surgery, Internal Medicine, Gastroenterology, General Surgery, Psychology, Pediatrics, Psychiatry, Urology, Gynecology, Colposcopy, Audiology, Hearing Screening, Echocardiogram, Dermatology, Pediatric Surgery, Cardiology, Physiatry, Occupational Medicine, Neonatology.

a) Centro Quirúrgico
b) Centro Obstétrico
c) Emergencia (24 horas).
d) Hospitalización 180 camas
e) Terapia Intensiva 16 camas
f) Neonatología 28 camas
g) Laboratorio Clínico, Laboratorio de Anatomía Patológica, Laboratorio Transfusional, Imagenología (rayos x, mamografía, ecografía).
h) Farmacia 24 horas.
i) Rehabilitación Física

Salary Remuneration in the Health area

In Ecuador, the salaries of the Public Sector are regulated through a salary scale, the same one that is governed by the Ministry of Labor, in the matter of health, some increases were made and the salaries differ from the rest of the public sector (MSP, 2014).

Beginnings of COVID-19

Since the end of 2019, the world has suffered a pandemic that it has not remembered since the time of the Spanish fever, the same one that is detailed in the following chronology table:

Table 1. Timeline of the beginnings of COVID-19

DATE	EVENTS
12-29 /12/2019	The coronavirus, called COVID-19 by the WHO, is a cousin of the also deadly SARS virus. The first cases of COVID-19 appear in Wuhan - China, appear as pneumonia
1 /01/ 2020	Chinese health authorities shut down the Huanan Seafood Wholesale Market, after it was discovered that wild animals sold there may be the source of the virus.
5 /01/ 2020	China announces that the unknown cases of pneumonia in Wuhan do not correspond to SARS or MERS. In a statement, the Wuhan Municipal Health Commission says a retrospective investigation into the outbreak has been launched.
7 /01/ 2020	Chinese authorities confirm that they have identified the virus as a new coronavirus, initially named 2019-nCoV by the WHO.
11 /01/ 2020	The Wuhan Municipal Health Commission announces the first death caused by the coronavirus. A 61-year-old man, exposed to the virus at the seafood market, died on January 9 after respiratory failure from severe pneumonia.
16 /01/ 2020	In Japan, authorities confirm that a Japanese man who traveled to Wuhan is infected with the virus.
17 /01/ 2020	Chinese health officials confirm that a second person has died in the country. The United States is responding to the outbreak by implementing symptom screenings at airports in San Francisco, New York, and Los Angeles.
21 /01/ 2020	Officials in Washington state confirm the first case of coronavirus in the United States.
24 /01/ 2020	The first cases of coronavirus are reported in Europe. They were in France.
25 /01/ 2020	The number of cases in the world exceeds 1,000. A total of 1,287 cases are registered.
26 /01/ 2020	More than 2,700 confirmed cases in China and 50 in other parts of the world. There are 80 dead, all in China. China suspends domestic and international tours.
30 /01/ 2020	The United States confirms the first contagion of the Wuhan coronavirus transmitted from person to person. The World Health Organization declares the coronavirus an international public health emergency.
5 /02/ 2020	The global death toll from coronavirus exceeds 500 people.
7 /02/ 2020	Li Wenliang, the Wuhan doctor who was targeted by police for trying to alert about a "SARS-like" virus in December 2019, dies from the coronavirus.

11 /02/ 2020	The WHO names the coronavirus as COVID-19.
14 /02/ 2020	A Chinese tourist who was diagnosed with the virus dies in France, becoming the first person to die from the outbreak in Europe. The death toll from the coronavirus rises to 1,500. In addition, Egypt announces its first case of Wuhan coronavirus, according to a joint statement from the Egyptian Ministry of Health and the WHO. It is the first confirmed case and the first in Africa since the virus was detected.
20 /02/ 2020	Five Ecuadorian students are among the 72 people evacuated from the Chinese city of Wuhan, the epicenter of the coronavirus (COVID-19) outbreak.
29 /02/ 2020	First case of coronavirus in Ecuador, a 71-year-old woman who arrived on February 14 from Spain.
01 /03/ 2020	Five new cases of coronavirus in Ecuador, which presented "mild symptoms".
02 /03/ 2020	89,097 people contacted the digital platform set up in Ecuador to deal with the disease. Of that amount, the 'call center' 171 has managed 38,742 attentions. While on the page www.citas.med.ec 50,355 records were recorded at the time of this publication.
08 /03/ 2020	Italy decrees quarantine for more than 15 million people to curb coronavirus
17 /03/ 2020	The World Health Organization declares a coronavirus pandemic The Ecuadorian woman considered a "primary case" dies Ecuador enters total confinement

Source: (CNN en Español, 2020) y (Martínez, 2020).

The table shows the main events that occurred during the beginning and the first months of the COVID-19 pandemic worldwide and in Ecuador, where, despite the warnings, it can be read that there was a delay in making decisions, which worsened the level of contagion worldwide.

This was a fundamental factor of absenteeism worldwide since the infected person, by protocol to avoid further contagion, had to remain in quarantine for approximately 20 days.

METHODOLOGY

In the research methodology, a non-experimental cross-sectional design is applied, so it is a study in which the variables are not manipulated, but the observation of the study phenomena is established in the environment where it is performed, generating a subsequent analysis; Within this non-experimental research, the design is descriptive, seeking to expose as many details as possible to have a complete image of a phenomenon.

The type of research is quantitative where the observed phenomena should not be affected by the researcher, the data collected are numerical or statistical since this research seeks to identify the costs and causes of absenteeism due to medical reasons in the period between January to December 2020, considering work absenteeism due to COVID-19.

The variables studied were: age, sex, occupation, salary, days of absenteeism and the causes of absenteeism.

The population or universe is the set of all cases that agree with certain specifications. (Hernández Sampieri et al., 2014), for this project the population under study is the staff that works in the Hospital, which is of second level of health that is located in a city on the coast of our country, to determine the population universe from which the sample will be established, inclusion and exclusion criteria have been considered, which are detailed in the following table:

Table 2. Population inclusion and exclusion criteria

Inclusion criteria	Exclusión criteria
Personnel of both sexes, over 18 years of age, affiliated with social security, absenteeism from work for medical reasons for 8 hours or more of a working day, personnel who have presented Covid-19 infection confirmed with PCR tests within the study period	Personnel with absenteeism for non-medical reasons (permissions, vacations, leave due to mourning, maternity, lactation or calamities), personnel absent from work due to medical reasons without justification of a certificate to support it.

Source: Second Level Hospital

Once the inclusion and exclusion criteria for the total population have been established, it is indicated that it is finite since the population size to be investigated is known to be 353 doctors, of which the sample, which is the subgroup of the universe or population of which the data is collected and that it should be representative of it (Hernández Sampieri et al., 2014), it is defined by the number of doctors with justified absences who work in the hospital, which is 185, which represents 81% of the hospital, total population. In which a heterogeneity of 50%, a margin of error of 5 and a confidence level of 95 were used.

For the categorization of the main diseases, the International Classification of Diseases of the World Health Organization (ICD-10) was used.

The collection of information was carried out through the Human Talent area of the Hospital, which has exact records of the absences of the workers and their causes.

The information obtained was structured in excel, to later be transferred to the SPSS statistical program, which offers advanced statistical analysis, is easy to use and access, is accessible to all users, and is suitable for projects of all sizes and levels of expertise. complexity (IBM, 2020), from this application the results are obtained that allow knowing if the objective of the investigation is fulfilled.

RESULTS

As can be seen, we have the results obtained at the end of the statistical analysis, by correlating the data in the SPSS statistical system, a qualitative and quantitative analysis was obtained, established in the variables of age, sex and quantitative analysis such as time of absenteeism, the causes of absenteeism, the area to which the doctors belong; Of the sample studied, the gender that prevails most in hospital doctors is the male sex with 51% (n=94) and how we can observe that the female sex follows it with a minimum distance of 49% (n=90).

The ages of the hospital doctors' range between 27 and 68 years, with a predominant age of 32 years, being 9% (n=16), followed by 31 and 34 years with the same percentage of 7.3% (n= 13) and physicians who are 28 and 35 years old, represent 6.7% (n=12), these are the largest groups that represent the burden of physicians within the Hospital.

Corresponding to the areas of work evaluated, we can show that there is the largest number in ICU Physicians who represent 31% (n=58), followed by Emergency physicians with 19% (n=35), continue Internal Medicine doctors 17% (n=31), Surgery and Internal Medicine doctors with 8% (n=15, n=14), followed by Gynecology doctors with 6% (n=11) and finally Pediatrics with 5% (n=9).

Table 3. Sociodemographic data

Especialities	Quantity	Female	Male	%
Emergency	35	14	21	19%
ICU	58	23	35	31%
Gynecology	11	5	6	6%
Surgery	15	6	9	8%
Neonatology	12	8	4	6%
Anesthesiology	14	7	7	8%
Internal Medicine	31	21	10	17%
Pediatrics	9	6	2	5%
TOTAL	**185**	**90**	**94**	**100**

Source: The Authors

Regarding the months in which the greatest number of doctors were absent from their work, we have the following: July 31% (n=32), June 11% (n=20), August with 9% (n=20), April 8% (n=11), October 8% (n=14), May 6% (n=9), March 5% (n=12), November 4% (n=81), December 4% (n=78), January 4% (n=75) and February 3% (n=61).

For the calculation of economic values, the salaries and the number of medical personnel working in the Hospital were analyzed, through the health salary scales (Public Sector scale), SP7 (Public Servant 7), the value is $1,676.00 (n=109; 56.7%), medical specialists $2,641.00 (n=64; 36.6%) and medical specialists of $2,967.00 (n=12; 6.7%), this allows us to obtain the values of time and the cost of the day worked to determine the expenses for absenteeism.

To calculate the value per hour, it was done according to the salary of each doctor, that is, the value per day of work was first established, applying the formula of Salary/30 (days of work), in the same way, proceeded to make the value per hour of work, which is equal to the salary / 240 that is obtained by multiplying (30d x 8h), once the value per day was established, it was possible to determine the total value of the expense that absenteeism represents to the state labor in the 185 doctors analyzed, in table 4 you can see the months, the number of doctors and days and the value or cost of absenteeism per month.

Table 4. Cost of Absenteeism per month

Month	Days of absenteeism	Number Doctors	Percentage	Cost per of absenteeism
January	75	15	4%	$5.323,99
February	61	8	3%	3275,32
March	87	12	5%	7930,54
April	159	11	8%	11500,76
May	123	9	6%	7100,34
June	210	20	11%	15300,67
Juliy	583	32	31%	33789,11
August	166	20	9%	10740,09
September	137	21	7%	7912,6
October	154	14	8%	12112,4

November	81	9	4%	7345,76
December	78	14	4%	3245,1
TOTAL	**1914**	**185**	**100%**	**$125.576,68**

Source: The Authors

Table 4 shows the total value in 2020 for the cost of absenteeism, that is, it costs the Hospital $125,576.68; a total of 1914 days of absenteeism were obtained in 175 physicians analyzed as a sample; the value per days of absenteeism, the number of doctors and the cost per days and per number of absent medical personnel for each month were established, with the main high values being the months of July $33,789.11 (d=5833, n=32), followed by the month of June with a total cost of $15,300.67 (d-210, n=20), followed by April with a total cost of $11,500.76 (d=159, n=11).

Illustration 1. Main causes of absenteeism
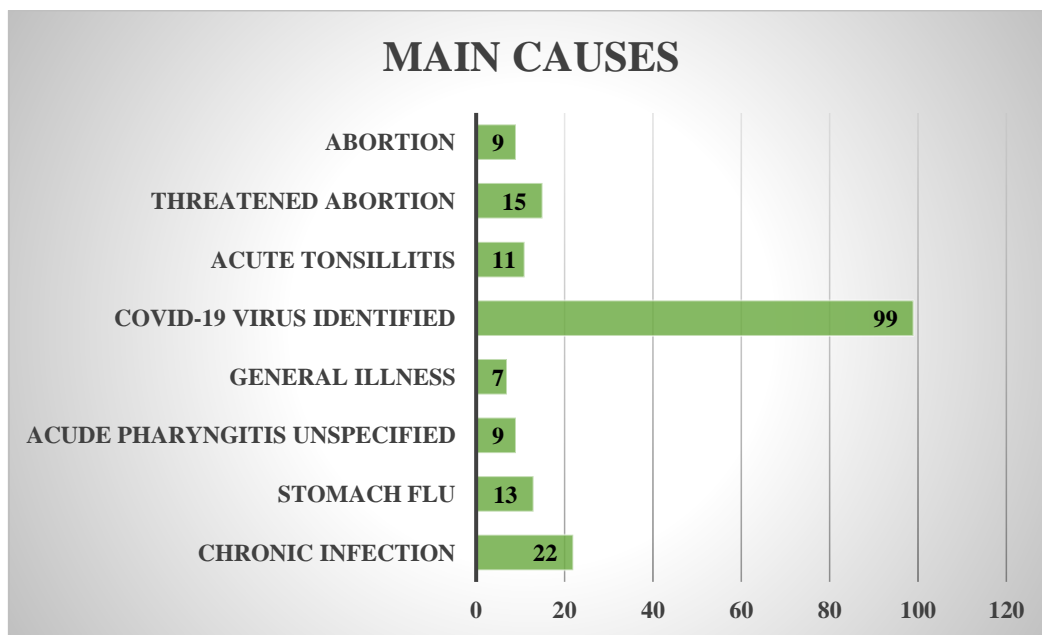
Source: The Authors

When analyzing the causes of work absenteeism, it gave us a list of 68 origins of justified illnesses, in some cases they occurred for a single occasion and in others the causes were repeated, therefore, Illustration 1 shows the eight main causes, among which COVID-19 affected 99 doctors, generating a cost due to absenteeism of $93,478.36, another factor is chronic respiratory tract infection, with 22 doctors affected, the same ones that could be possible COVID-19 but They were not identified as such respiratory infections, causing a cost of $20,772.84, another important factor is the threat of abortion, defined as the presence of intrauterine hemorrhage before the twentieth full week of gestation, with or without uterine contractions, without cervical dilation and without expulsion of the products of conception (González Rivera, 2014), this cause affected 15 doctors, which represented a cost of $14,163.3.

Another cause that affected was gastroenteritis, which is the inflammation of the internal lining of the stomach and the small and large intestine, generally due to an infection caused by a microorganism, but it can also be caused by the ingestion of drugs

or chemical toxins (Boyce, 2019), the amount that represented this cause is $12,274, making it impossible for 13 doctors to work; other no less important causes, being minor, are abortion with and unspecified acute pharyngitis with $8,497.98, which is an inflammation of the oropharynx characterized by the presence of a sore throat (odynophagia), which can be acute and chronic (Costa Ribas & Amor Dorado, 2020), while the doctors were absent due to acute tonsillitis, which is an inflammation of the tonsils, sometimes, along with tonsillitis, the adenoids also swell (MedlinePlus, 2021), achieving that in both cases the absenteeism is 9 doctors for each illness, and general illness is another cause of absenteeism of 7 doctors during 2020, representing a cost of $6,609.54.

When determining the COVID-19 disease as one of the main causes of absenteeism, it is detailed through table 5, the areas and the costs affected for the Hospital.

Table 5. Cost of absenteeism due to COVID-19

COVID-19		
	Female	$19.777,56
SEX	Male	45544,33
	TOTAL	**$65.321,89**
	Emergency	5442,13
	ICU	40631,22
	Ginecology	1235,45
	Surgery	7155,23
WORK AREAS	Neonatology	3768,21
	Anesthesiology	2444,25
	Internal Medicine	2420,8
	Pediatrics	2224,6
	TOTAL	**$65.321,89**

Source: The Authors

Once the main cause of absenteeism has been detailed, it is important to establish the rate of justified absenteeism in the 185 doctors who work in the second level Hospital. As determined in the review of the literature, it is calculated through the established formula in hourly values.

$$\text{Excused absenteeism rate} = \frac{\text{Excuses lost hours}}{\text{\# total working hours available}} \times 100$$

Excused absenteeism rate = 13520/42720) x 100

Excused absenteeism rate = 31,65

Which means that, in the year 2020, the Hospital worked with 68, 35% of the medical workforce, so that the health house works at 100% of its medical capacities (man/hour), it needs to compensate absenteeism of that year, with 31.65% more medical personnel, therefore, an additional cost is generated to eliminate the costs of absenteeism.

DISCUSSION

The cost for the hospital during the year 2020 due to the pandemic was quite large, generating economic losses for the country due to forced confinement as the main measures to mitigate the level of contagion, this affectation transcended towards the

most vulnerable sector in this period of time, which was the front-line staff, including the doctors, when they found themselves involved, Being directly involved in the care of COVID-19 patients, many doctors were infected nationwide, many of them even lost their lives; In the second level hospital, this affectation was evidenced through absenteeism for this cause, generating a cost of $65,321.89, in addition to the 7 more causes that affected the normal performance of the work of the health personnel in the study.

The Medical Edition magazine (2020) During the period of confinement, the President of the Republic, Lic. Lenin Moreno, issued some economic measures to safeguard the stability of the country while people are in confinement to prevent the spread of the virus, among the measures that are executed, was the reduction of the salary of public servants for 6 months, this measure was not applicable to teachers, for health personnel, police and military, who were part of the front line personnel, without a doubt, this would have been a very adverse effect and would have exacerbated absenteeism in the Hospital, since exposure to the virus was high and deadly; In this context, already in the month of September 2020, in an analysis carried out by Amnesty International, it reported that Ecuador ranked fourth among the countries of South America with (83 deaths) of health personnel.

Undoubtedly, the causes for which absenteeism has occurred are varied, but above all they are linked to respiratory and intestinal diseases, and having 49% of female personnel, absenteeism is generated for reasons that require total rest. such as abortion or threatened abortion.

CONCLUSIONS

This research work has made it possible to determine the level of absenteeism in the medical staff of the second-level Hospital and its economic implication that justified absences or permits entail during the year 2020, obtaining important data for the consideration of the Administrative Directorate.

The sociodemographic data established that the Hospital works 51% of men and 49% of women, the main areas of work affected by absenteeism are the Intensive Care Unit, Surgery and emergency, absenteeism is determined by days and permits were established or excused absences from 1 day to 36 days, with 38 doctors having permits of one day, while 31 people missed 2 days, and 9 were absent for 30 days.

The 185 doctors during 2020 were absent in 1914 days generating a cost to the hospital of $125,576.68, considering for this calculation the 3 salaries that the doctors have of $1,676, $2,641 and $2,967. Among 68 causes of absenteeism from work, the main one was due to contagion of COVID-19 in 35% due to the exposure of doctors during the first months of the pandemic.

This research will allow future studies to delve into the solutions that can be generated from the diagnosis of the causes of absenteeism in certain areas, or in specific personnel, within the health system, considering that it is the most vulnerable profession in these areas. times of pandemic.

It is recommended to carry out the application of a test or survey to determine the subsequent effects that the causes found can lead to if they are not treated in time, thus seeking to improve the rate of absenteeism that currently exists in this study.

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